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ART. I.—*On the Diseases of the United States' Army on the Rio Grande.* By WILLIAM G. PROCTOR, M.D., of Louisville, Ky. (An Inaugural Dissertation submitted to the Trustees and Medical Faculty of the University of Louisville for the Degree of Doctor of Medicine, March 8th, 1848.)

In the capacity of Hospital Steward to the Louisville Legion, I had an opportunity of observing every case of disease that occurred among its men, together with a great number in other regiments, and being much favored in having a principal and an assistant surgeon for our corps, who were ever ready and willing to render me assistance, I flatter myself I obtained a clear and intimate knowledge of the subject of which I am about to write.

The Legion was mustered into service without inspection;

the consequence of which was that many of its members were wholly unfit for the service they were entering.

Many chronic diseases, and constitutions destroyed by lives of dissipation, or else by nature or previous habitude too delicate for military hardships, were early found in our regiment. From the very commencement of the campaign, too, we had to encounter inclemencies of weather and unfortunate circumstances of physical condition, likely, not only to irritate and inflame diseases already lurking in the system and cause to appear those to which there was a predisposition, but to produce almost every variety of sickness, even in those in sound health and of robust constitution. At Algiers, opposite New Orleans, where we first encamped after leaving Louisville, for several days previous to our departure, our quarters were literally inundated, and upon leaving that point our men were transported to the Brazos in crowded vessels, illy provided with clothing; even that they had being saturated with water and pestilential with filth. From this time forth on the part of the common soldier, there was but little regard for personal cleanliness, to which fact is attributable much of the subsequent disease and its virulency. Nor in their other habits were many of the regiment more observant of their health. Intemperance, unwholesome food, and irregularity of diet, were other prolific sources of ill health. The water too on the Brazos was intolerable, impregnated as it was with salt, sulphur, and other impurities. An exposure by day to a tropical sun of heat 80° to 105° Fahrenheit, and by night to a great depression of atmospheric temperature, was likewise very unfavorable to us.

Before reaching Camargo we were encamped for sometime at a point about twenty miles above the mouth of the Rio Grande, on a plain of clay soil, about sixty feet above low water mark. Here the rainy season of the country fairly set in on us, and we had showers every day falling sometimes in torrents for days and nights together. Our tents were thin and inadequate to our protection, while the soil would not absorb the rain; so that dry apparel or quarters were things

unknown to us. This state of things lasted through the months of June and July. I must say, however, that we were during this period less exposed to vicissitudes of temperature than subsequently, though the heat was excessive by day and little relieved by sea-breeze.

Camargo, situated 250 miles further up the Rio Grande, was our next camping ground. Before reaching this place, the rainy season had to a degree subsided; though heavy rains occasionally fell. As to elevation and soil, we were located at this place about as at the one we had just left. The forest growth along the Rio Grande is the muskeet, a stunted species of the locust, intermixed with ebony. At Camargo the heat was excessive, ranging between 80° and 110° Fahrenheit, while no sea-breeze mitigated its fervor. The water, too, was here, as well as at the previous camp, unpalatable and unwholesome. When about leaving this for Monterey about the middle of September, the changes of atmospheric temperature were becoming sudden and marked.

At Monterey we remained till the latter end of December. During and for several days after the battle at this place, the troops were subject to many privations, to fatigue and exposure. It rained during this time for 48 successive hours. We were here encamped in a very low bottom, fertile and abundantly watered by numerous springs flowing from almost every mound. Our camp was bounded on its south-east side by an extensive swamp, and many similar ones were in our immediate vicinity. The forest growth of live-oak, hickory, &c. of large size, was covered with the celebrated Spanish Moss. Here the days were almost insupportable from heat, the nights from cold. The latter end of December, a forced march was made to Saltillo, seventy miles distant, where we were exposed to still greater vicissitudes of atmospheric temperature, with less means of protection from their injurious effects.

Such is a brief history of our campaign so far as it bears on my subject; in the examination of which I have had a work of more length and labor than I had anticipated or designed.

In the selection of it I have been governed alone by the interest which the subject affords.

In what I am about to say I will be guided more by my own experience than by a reference to books; this probably will account, in part, for my unsystematic statements of symptoms, causes, treatment, &c. In stating the causes of diseases, I have confined myself to such as have come under my observation. In symptomatology, as well as in treatment, I have strictly adhered to the same general rule. In speaking of remedies, space compels me to speak only in general terms, and to avoid specification, which is at any rate worse than useless, and would have proved the great excluder of many general and important facts. Such remedies as are specified, are so from evident reasons.

A SCHEDULE of the Diseases of the Louisville Legion during the Campaign of 1846 *and* 1847 *on the Rio Grande.*

TAKEN SICK OR RECEIVED INTO HOSPITAL.

Months.	Fevers. Feb. Int. Quotid.	Fevers. Feb. Int, Tertian	Fevers. Feb. Int. Quartan	Fevers. Feb. Int. Remittens	Fevers. Feb. Typhus	Fevers. Feb. Typhus Icterodes	Erupt. Fever. Erysipelas	Erupt. Fever. Rubeola	Diseases of the organs connected with the Digestive System. Cholera Morbus	Cholera	Diarrhœa	Dysentera Acuta	Dysentera Chronica	Dyspepsia	Enteritis	Gastritis	Icterus	Hepatitis	Obstipatio	Tonsilitis	The Respiratory System. Bronchitis Acuta	Bronchitis Chronica	Catarrhus	Laryngitis	Pleuritis	Pneumonia	Brain and Nervous System. Apoplexia	Chorea	Delirium Tremens	Epilepsia	Mania	Melancholia	Neuralgia	Neuralgia Intermittens	Nostalgia
June,	12	3	2						6		178	26			2	4			24			4			3	3		1						3	
July,	36	10	6				1	1			166	50	17				1	1	141				2		2	3						4			1
August,	101	15	7	1			1	1	1		55	9		3		2			18	1		4	3		2	6	1				1	1	3	1	2	
Septemb'r	23	12	8				1				20	9		1	1		2	2	9						1	1									
October,	44	78	31					5		4	27	1				3	1	2	8		2	1	4			2									
Novemb'r	12	52	85	2	5	1		1		1	24	10	6			2			6			4	1			2						1	1		
Decemb'r	25	31	9	1	3					1	9	20	7		1	2			3							1					1	3	2		
January,	34	18	1	2	1						23	19	7						4	3	1	4	2	1									1	1	
February,	3	8	14		1		2			1	13	12	6			1	2	1	4	1	1	1	7			4						2	2	
March,	3	5	12	1	1						12	20	1			2	1		5			1	2	5		3				2	1	3	1	
April,	6	6	10		1	1	1	1			10	6	8			1			1			1											1	

[*Schedule contiued on next page.*]

A SCHEDULE of the Diseases of the Louisville Legion during the Campaign of 1846 *and* 1847 *on the Rio Grande*

TAKEN SICK OR RECEIVED INTO HOSPITAL.

Months.	Urinary and Genital Organs.							F. & M. Tissue		Absces Ulcers		Wounds and Injuries.									
	Gonorrhœa	Nephritis	Orchitis	Strictura Urethræ	Syphilis Primitiva	Syphilis Consecutiva	Varicocele	Rheumatism. Acuta	Rheumatism. Chronica	Phlegmon et Abscessus	Ulcus	Ambustio	Amputatio	Contusio	Fractura	Luxatio	Subluxatio	Vul. Laceratum	Vul. Punctum	Vul. Sclopeticum	Vul. Morsum
June,	9				2	2		1	1	2	5			3			2		8		
July,	5		1		3	1	3			13	5				1	4		1	12		
August,	2		1			1		4	4	5	1	6			1	2	1		3		
September,								2		13	4	4				3	1		1	3	
October,		1	1					9	2	8	9	2	1	2			3		1	3	
November,	2							5	2	5	1			1				1		2	
December,	1							2	1					1		1				2	
January,	2			1	1			2	4	1	1			1	1						
February,		1		1	3	2		1	2	6	3							1		1	
March,	1			1	1			1	1	3					3	2	1		1	1	2
April,							1		1	1	2		1	1		1		1		2	1

Months.	All other Diseases.															
	Inflam. Burs. Mucos.	Debilitas	Hæmorrhoides	Hernia	Morbi Cutis	Odontalgia	Ophthalmia	Iritis	Otitis	Pterygium	Scorbutus	Splenitis	Suicidum	Varix	Vermes	Morbi Varia
June,	1	2		1	6	2	2		1					2		3
July,			4		5	3		1	4	3	4			1	2	
August,		4		8	1	1	2	1	5		8					4
September,				2	3	1	7	3	1	1	6					
October,	1	3	1	4	5	1	1	1	1		1	1		1		2
November,	1	2	1	1		3										
December,			1		2	5	1		1							
January,		3			1	4								1		2
February,		1				8	2	1	1	1		1			1	
March,			3		4	1				1		1			1	
April,		1			1	5										

Common continued or simple, fever as the first on our list, commands briefly our first attention.

Fever is essentially a disease of the whole system, for abundant evidence of which it is only necessary strictly to watch and carefully analyze its symptoms in a single case.

That it effects the brain is evident in the head-ache—delirium—coma—altered functions of the external senses, which may be either by perversion, or by increased or diminished activity. That it affects the nervous system generally, is evident from the general and indescribable uneasiness and soreness, suffered by every patient laboring under this disease. This is also exemplified in a most satisfactory manner in typhoid fever, in which the collapse forms so important a feature; the anxious and labored respiration of febrile patients is also manifestly dependent upon nervous derangement. That the intestinal canal is very powerfully affected, is manifest from the phenomena in the stomach, such as nausea and vomiting, flatulence, soreness, heat, &c., as also from the almost universal constipation of the bowels in every attack of this disease; and it is even asserted by some, that the stomach is so powerful a protector of the general system, that unless its functions be previously destroyed and its resistance subdued no febrile disease can be formed, and that, in its passage from local to general fever must pass through that organ and generate derangement there as a necessary link in its chain of phenomena. That the muscular system is affected, is evident from the great soreness and indisposition to muscular exercise. That the glandular system is affected to a very great extent is manifest from the first action of the disease never failing to diminish, to a great extent, the secretions in every part of the body. The liver ceases to secrete bile—the kidneys, urine—the salivary glands, saliva—the skin, perspiration; and even ulcers, pro tempore glands, secrete a diminished quantity of their ordinary discharges. The stomach also is impaired in its secretions, which properly accounts for the nausea, vomiting, distaste for food, &c., with the many other morbid phenomena presented in that organ. That the absorbents have

their share also, is evident from the rapid emaciation, the absorption of hydropic extravasations, &c. That the heart and arteries are also concerned is evident from the excitement manifested in them; the pulse is all over the world considered one of the greatest, if not the greatest diagnostic in our profession—the frequency of the pulse is dependent entirely upon the heart's action; its other indications as hard, soft, wiry, corded, &c., are dependent either entirely on the state of the arteries or the conjoined action of the heart and arteries. May not the inefficient action of the heart depend upon the resistance the blood finds in passing over the arteries comparatively dry from a cessation of secretion in the mucous membrane?

These seem to me sufficient evidences of the truth of the position that fever is a disease of the whole system, and having enumerated most of the symptoms in evidence in the premises, we are now prepared to say a few words on its *treatment.*

The first indication in this, as in all other diseases, is to discover and remove, if possible, the exciting cause; and since the most common by far of these is found in the stomach or intestinal canal, a most careful investigation of these parts should always be instituted; and if the cause be found in these parts unaccompanied by lesion of structure, or too much inflammation, a full emetic of ipecac and tartar followed by a a cathartic, having its base in some of the mercurial preparations, will in many cases prove adequate. Nor is the efficacy of these remedies limited to cases dependent for their origin on disorders in the alimentary canal; for if they be not the first cause of the fever they are generated by it; and their removal is none the less indicated; hence we are led to consider them as important remedies in fevers dependent upon almost any cause. Nor is the curative agency of these remedies limited to this removal of the irritating substance from the bowels, but also by the almost specific effects of many of their ingredients upon the different parts of the system. The specific effects of tartar emetic in controlling the heart's action and in restoring cutaneous as well as other secretions are too well

known to demand even a passing notice. So also the action of the base of the cathartic in producing its well known alterative effects. And that these secretions should be re-established is no less an item in the curation of fever than the removal of the exciting cause, for so long as these secretions remain arrested, so long will there be sufficient cause for fever. I should also have mentioned diluents which exert their influence by weakening and dissolving the morbid secretions as well as by their more direct action in relieving the abnormal temperature.

I must here caution my young friends in the profession upon the use of blood-letting. Whilst this is unequivocally the first remedy in all phlogistic disorders, it is as emphatically one which should be only used with the greatest caution. Here the young practitioner needs to be thus cautioned; all-powerful agents produce powerful effects, and whilst in experienced hands this remedy is probably productive of as much good as half the other remedies combined, in the hands of the inexperienced it is probably productive of as much injury as half of all the other remedies that can be used. Nor is this at all to be wondered at: he commences his career fresh from the halls of an university, where from an infinity to be taught, and the short space of time allowed for that purpose, the professor is compelled to deal only in general principles. These teach him that bloodletting is the most speedy and certain controller of inflammation, but it is utterly impossible for him to learn, without practical experience, the particular cases in which the remedy should be used or dispensed with. No professor, however great his capacity and experience, can lay down any universal and unvarying rules, which are to govern us in bloodletting, and no student, howsoever great his capacity, can learn, in a lecture room, all such indications. These are practical points and must be learned at the bed side. The young practitioner is too apt to bleed at any rate; he is too officious in the use of instruments, and is over anxious for the speedy recovery of his patients, and he not unfrequently bleeds his patient when he is not absolutely certain that it is demanded. And what are some of the evil consequences?

Why they are either prostration from which his patient never recovers, or at best a long and protracted convalescence which is bad enough in all conscience.

I could not, did even time and space permit, enumerate the various remedies which are considered valuable in this disease, and if I could it would be of no avail, since it would yet be more difficult to enumerate the particular crisis in the disease at which they should be administered: these are things as varying as the constitutions and idiosyncrasies of men, and as numerous as the circumstances under which they are placed. These, too, are things to be decided on only at the bed side, and he may consider himself well remunerated, who, after much experience and trouble, has acquired only a tolerable knowledge of these points.

But I cannot dismiss this subject without expressing the high regard I have for the tepid bath in diseases of this sort—or if the bath cannot be procured, for the sponging of the body with a sponge and tepid water. I have witnessed this remedy followed by so much success that it seems to hold a front rank among the anti-febrile remedies. I would be ungrateful to the remedy itself, were I not to mention it here, believing as I do, that to its agency I am indebted for, if not the lives, at any rate for the mitigation of much suffering in some of my best friends. Dr. C. had for several days been laboring under a sharp attack of fever, much prostrated, slightly delirious, or rather what we term *flighty*. Medicines refused to operate, venesection was attended by but temporary and slight relief; he was sponged cap-a-pie with tepid water; cutaneous action soon set up, a free alvine evacuation shortly followed, and from this time his convalescence was uninterrupted. I. G. had been for many days laboring under an attack which had resisted all treatment. His recovery had been entirely despaired of; typhoid symptoms had existed for several days; then coma; gums, tongue and teeth covered with sordes; and in fine every symptom of approaching dissolution. As a last respect to his sufferings, rather than a hope for his recovery, this kind of sponging was resorted to, and from this time may be dated

his convalescence, and though it progressed very slowly we had the pleasure of seeing him entirely restored.

I shall now offer a few general remarks on intermittent fever, applicable to all its types, the tertian, quotidian, quartan, and all the extensions and complications of these primary types. The lassitude, pale and shrunken skin, small and frequent pulse, rigors, confused and inattentive mind, in violent attacks coma or delirium, pale urine, quick and anxious respiration, great thirst, &c. of the cold stage; nausea and vomiting, hot dry skin, full, strong and frequent pulse, free and regular respiration, high colored and scanty urine, headache, &c. of the hot stage; and the profuse perspiration, soft and full pulse, strong and frequent respiration, copious and sedimentous urine, and in fine, a general abatement of all the symptoms of the preceding stages until it terminates in apyrexia of the sweating stage: These are symptoms, I repeat, applicable to all its forms except that occasionally, though very rarely, we meet with an anomalous case, such, for instance, as an apparent entire want of the cold stage.

In remarking on this disease, I shall consider it essentially and strictly a nervous disorder. So near is it allied to other nervous affections, and so inseparable are they, that I can but consider them sisters of the same genera. To this I have come rather from an examination and analysis of the symptoms than from the teachings of books or my kind preceptor to whom I am indebted for the warning more than once repeated of "*beware of your nervous irritation.*" But let us compare for a moment the symptoms, causes, and treatment of this disease with those of other nervous affections. Like other nervous diseases it finds its favored victims in pale asthenic persons—persons who live on a scanty and insufficiently nutritious diet, in such as never had any constitutions at all, or whose constitutions had been previously destroyed by disease or dissipation, in those much exposed to vicissitudes of temperature, and above all, in inhabitants of low, damp, marshy countries. Like other nervous disorders, it is remitting or intermitting in its action. And again, all the remedies

used in the cure of this disease are addressed to the nervous system. Quinine, iron, bitters of various sorts, &c., are, it seems to me, addressed solely to the nervous system, strengthening that portion of the economy, and thereby producing their effects upon the disease. I am aware that the doctrine is now held by more experienced persons than myself, that quinine as the representative of bark does not produce its effects by its tonic properties, but by a "*specific action upon the poison inducing the disease;*" now that it does act specifically, if you please, upon the poison I am willing to confess, but I do hold that this specific action is produced by a secondary process, that is, through the nervous system by its tonic properties. No one pretends to claim for all the tonics *alterative properties*, yet they cure intermittent fever, and it seems to me upon the very same principle as quinine. I cannot enter into a further discussion on the modus operandi of medicines. It is a subject I have carefully avoided as being one of as much evil as good, since it does not in any manner promote the action of remedies, and serves only to embarrass the young student.

Having taken the ground that the predisposing cause of intermittent fever proper is in the nervous system, let us next consider some of the most frequent exciting causes. Among these, first, I will mention

Malaria, not only because it is almost universally considered the great source of this disease, as well by the people as by the profession, but also because experience has shown me that all other things being equal, we had more than *five times* the number of cases of this fever whilst situated in malarious localities and under circumstances favorable to its influences. For the evidence of which I have only to refer to the accompanying schedule and prefatory statements. Now it must be borne in mind that with the exception of position, we were subject to almost the same causes of disease throughout the campaign; that they were the same constitutions, living on the same food, subjected to the same privations, and exposed to the same vicissitudes of temperature. With these facts

before me, I can come to no other conclusion than the proposition with which I started out in this sentence—that malaria is the most prolific progenitor of intermittent fever. Now as to the manner in which malaria produces its effects, I can say nothing, unless it be through the vast expanse of nervous tissue plated out on the surface of the body and on its continuation, the mucous membrane of air passages and lungs. This seems abundant surface to expose to its action. The mode in which the debility is produced, is, probably, by its first action upon the nervous extremities, and through them upon the nervous centers, thereby deranging the entire healthy process, causing the formation of unhealthy blood, which in its turn nourishes the parent which produced it. This seems also, to account for the appearance of intermittent fever in persons long subsequent to their exposure to malaria. As collateral evidence that it acts upon the skin, flannel worn next the skin, proved with us one of the best prophylactics to this as well as to other diseases which might be ascribed to the same causes.

Vicissitudes of temperature seemed to be the next most prolific exciting cause, and to this single one I am inclined to ascribe most of the cases of this disease arising in low malarious positions. Nor is it at all strange, if I am correct in the opinion that this is a very prolific parent of this disease, that we were, when most removed from miasmatic localities, subject to no inconsiderable amount of intermittent fever, when it is borne in mind that we experienced the most sudden changes of temperature, as much as 50° to 60° in a very short time, connected with the fact that the men were very poorly provided with clothing and other protection, and exhibited great recklessness as regards their habits.

These, without enumerating others, seem to my mind abundant causes for the explanation of the amount of intermittent fever to which the regiment was subjected, and also satisfactory evidence on the long contested points, as to the question of the production of intermittent fever.

In the preceding remarks I have included none but intermittent fever proper, or in other words, that kind of intermit-

tent fever which is not ascribable to any discoverable pathological state of the system.

On the treatment of intermittent fever a very few words will suffice. The antidote is in the mouth of every one. Who does not know that quinine is an almost infallible cure for intermittent fever? As regards the administration of this remedy, it should be measured by effects and not by grains. I have rarely seen '*heroic*' doses, given two or three hours before a paroxysm, fail in arresting it. Its action should be kept up in the system by the administration of smaller doses at short intervals, that the system may be kept continually under its effects, which should also be continued a short time after the disappearance of the disease. The clearing out of the stomach and intestinal canal with a free emetic and cathartic should under ordinary circumstances be generally practiced; it leaves the system much more susceptible to the action of the subsequent treatment; nor do I know of a more speedy and effective means of hastening on the sweating stage than an emetic given in either of the preceding.

The various preparations of *iron* are in high repute in the cure of this disease. I have tested its efficacy in form of carbonate, on poor Mexicans, whose indigent circumstances and the enormous price of the quinine prevented their use of it; it never failed to produce the desired effects in any case in which I have seen it administered—notwitstanding I have seen it tried under the most inauspicious circumstances, in persons resident in malarious districts, and who have been subject to the disease for many years. An infusion of a kind of willow is much used by the poorer Mexicans and with very happy results. A doctor and an apothecary in Saltillo informed me that they rarely used any other remedy, and that its administration was crowned with the happiest results. I suppose its curative properties are dependent upon the salicine which it contains. Arsenic is also a precious remedy in this disease. I have seen much good follow upon its administration. Fowler's solution in combination with tincture of opium, commencing with small doses and increasing as the sys-

tem becomes accustomed to it, is a very excellent preparation, and is probably less offensive to the stomach than the crude arsenic. Almost all the stimulants are occasionally used during the apyrexia of the disease. I have seen the paroxysm checked in some and postponed in others by the administration of a bolus of opium, camphor, and ammonia. Capsicum, in combination with many tonics and stimulants, and alone, is not unfrequently a very good remedy. Venesection is recommended on the high authority of Dr. Mackintosh; this is certainly very valuable as a palliative remedy, it being the most speedy means of hastening the cold and hot stages. It should only be carried to a sufficient extent to restore the equilibrium between the nervous and circulatory systems; if carried to too great an extent, it will be productive of most pernicious effects. I have only witnessed its use in a single case, and that was in private practice, and bloodletting was indicated from other reasons than for palliative purposes, there being manifest appoplectic tendency; the loss of a very small quantity of blood was followed by great amelioration of the symptoms and the bleeding was not carried farther.

Why would not electricity be a good remedy in this disease; it is a nervous remedy, and acts upon the nervous system—and intermittent fever is a nervous disease seated in the nervous system.

Next we have diseases of the nervous system, and in this groupe I include only such as are primarily founded in the nervous system, or, if dependent upon another disease, exhibiting themselves as an anomaly of the nervous system.

The proximate causes are morbid affections of organic life, disturbance of functions, &c. The predisposing causes, heat, cold, climate, exposure, moisture, malaria, idleness, loss of blood, masturbation, mental emotions, local and specific irritation, the presence of foreign substances, &c.

The first indication in the treatment of nervous diseases, like that in all others, is to search for the exciting cause; here lies the difficulty in their treatment, for as various as the exciting causes, are the indications of treatment. If it be found

dependent upon a plethoric state of the system, then an antiphlogistic treatment is indicated. If upon an asthænic state of the system, then a tonic treatment is as surely indicated. If upon the presence of foreign substances the removal generally relieves the symptoms. In short, if the disease is idiopathically nervous, the treatment should be primarily addressed to the nervous system; if it depend upon any discoverable cause, then the treatment should first be addressed to the removal of that cause. I now remember several cases in which the symptoms were so obscure, that they baffled every effort to discover the cause; every means used for their relief was either fruitless, or if attended by any relief, it was only temporary. I will relate one. J. Early, a private in company I, had been troubled for a long time with "*sun pain*" over the right eye; the most careful examination could discover no other symptoms of the disease upon which to base the nervous disorder; still the most active nervines did not produce the desired effect. Early continued to complain of his sun pain, and being rather suspected of malingering, a full dose of the oil of turpentine was administered, which to the astonishment of all, produced the evacuation of several feet of *tape-worm*. The dose was repeated several times afterwards and a considerable quantity of tape-worm was discharged; after this time no more was heard of Early's "sun pain."

One of the most common causes of idiopathic neuralgia is nervous debility, and this is probably the indication to be treated in nine-tenths of the cases, for if it be not primarily dependent upon this state of things, it is speedily generated by it, and in its turn becomes the supporter of the disease and the indication to be treated. And since all partake more or less of periodicity combined, as I have above stated, with debility, the very best remedy that can be found is that which partakes at the same time of antiperiodic and tonic properties; as fulfilling these indications, the preparations of cinchona stand unrivalled. I do not now remember a single case of neuralgia or intermittent neuralgia, in which the administration of these remedies was indicated, which did not finally yield

to them. A most stubborn one came under my observation in Captain Saunders. He had for a long time been subject to an intermitting neuralgia, which came on with renewed vigor after an exposure; he took quinine in enormous doses, as much as half an ounce per day for several successive days; the disease was finally checked and he had not had another attack when I last saw him, which was several months after the cure was effected.

Iron in its various preparations is highly recommended in these disorders—of its powers I have but little personal experience, though they would seem, from their effects, to be peculiarly adapted to this state of things; the sesquioxide is the preparation most highly recommended. Arsenic is highly spoken of. I have seen it administered in the form of Fowler's solution, but do not remember any marked beneficial results. Opium, strychnia, conium, stramonium, aconite, &c., are much recommended by some, but they are all remedies addressed rather to the symptoms than to the cause of the disease. I am persuaded that the endermic mode of application is the preferable—their effects are very speedily manifested when applied over the course of a painful nerve previously denuded of its epidermis by a vesicant. Various counter irritants are much in vogue, though they should be cautiously used, especially in subcutaneous nerves. In the deeper seated forms they are more applicable. I witnessed a case of sciatica last fall, which was almost immediately relieved by a blister. I have never seen the moxa, acupuncturation, ammonia, &c., used.

From the number of remedies which have been used in this disease, it is evidently one which not unfrequently baffles the most scientific; the vaguest superstitions and the most powerful remedies not unfrequently have shared similar fates; and I now repeat, that if the remedies above mentioned fail, we have but little left to rest our hopes upon.

Another group of nervous disorders, differing very widely from the preceding neuralgia or nervous irritation, is melan-

cholia, a general disorder of the whole nervous system; of nostalgia, one of its varieties, I have now to speak.

Of the predisposing and exciting causes of nervous derangement enough has already been said, but I must here repeat, that previous habits, mental developments, great domesticity, mental and physical inertia, temperament, masturbation, &c., are probably the most common predisposing causes of this special form of these disorders; the exciting were generally previous diseases, disappointment, &c.

The treatment is preventive and palliative. I do not now remember a single recovery from this disease, after it had become thoroughly developed. The best preventive to this disease was exercise, mental or physical; the mind is most prone to melancholy when unoccupied by any sort of exertion. The disease was always most rife when we had been encamped for a considerable length of time in one position, and when the soldiers were permitted to remain in idleness: this disease was manifesting itself to a fearful extent in a company of young countrymen, who had been for several weeks encamped in one position and permitted to remain idle. A long march entirely destroyed the tendency, which did not recur until the same circumstances developed it.

Mental emotions had also great effect upon the disease. If the mind can be aroused into action, the disease may be considered cured. An example of this is shown in the following case:

T. B. F., a young man of sensitive feeling, had been for several days affected with the premonitory symptoms, great taciturnity, unless on matters pertaining to his returning home, disinclination to association, sadness, &c. On applying to the surgeon for a discharge, he was reprimanded in a caustic manner, which aroused his pride and anger; he left the tent, and from that time no more was heard of Mr. F.'s inability to do his duty as a soldier. This treatment will not answer in more advanced stages as was evident in the case of F. S. Stimulated by the happy result in the preceding case, the same treatment was tried in one more advanced, but this was as

near proving fatal as the preceding had been fortunate; the patient sank as if stunned by electricity, and did not again arise from his bed until a discharge was procured for and presented to him. This seemed to act like a charm,—in half an hour he was making active preparations for his departure, and a few hours saw him cheerfully on his way home. I. B. upon receiving a final refusal upon an application to be discharged was seized with symptoms of palpitation of the heart, which terminated his life in a few hours.

The following case will probably present, as well as a more extended description, the rapidity and irremediability of the disease. J. P., a young man of good constitution and habits, was attacked with a tolerably violent diarrhœa, this yielded to the ordinary remedies. Melancholic symptoms soon running into nostalgia, supervened; he ceased to notice surrounding objects, lay apparently comatose, when aroused and stimulated to conversation he always spoke of home, held conversation with his relatives, muttered disconnected sentences generally about domestic affairs, such as calling dogs, driving hogs, talking to children, &c. There were present no other symptoms of cerebral inflammation, no preternatural heat about the head, no flushing of the face; pulse soft, weak, and slow; the tongue was clean; and in short there was no indication for any sort of treatment, except the condition of the mind which I have already described. There was a relaxation of the sphincters for twenty-four hours previous to dissolution. Symptoms of cerebral inflammation are fequently seen; these demand blisters along the spine and the nape of the neck; this treatment was followed by good results in two or three cases in which inflammation of the brain was suspected. This disease is sometimes considered to depend entirely upon cerebral inflammation; if it does, the symptoms in the majority of cases are not to be discovered by the common practitioner.

Next on our list come diseases of the alimentary canal; nor is this by any means an unimportant group; in fact they outnumbered, for several months, all other diseases combined.

I shall say nothing on chronic gastritis or dyspepsia, nor

acute gastritis, nor inflammation of the intestines. Chronic gastritis is a disease for which little can be done in the field, and of which, we fortunately had but little. Acute gastritis and inflammation of the bowels demand prompt attention and antiphlogistic treatment to its full extent; disorders of such important organs are not to be tampered with. Counter excitants, anodynes, and mercurials are precious remedies in this disease.

Diarrhœa made no unimportant part of the disease of our regiment. The principal causes of this disease were, unwholesome ingesta, excess of eating and drinking, exposure, heat, cold, moisture. The principal feature in this disease, is the increased peristaltic action; the minor symptoms are very numerous varying according to the exciting causes. That induced by over repletion of the stomach, or unwholesome ingesta, is generally characterised by a foul tongue, bad breath, nausea and flatulence. All diarrhœas should be primarily considered sanative processes, attempts of nature at removing offending causes; therefore, if there is no contra-indicating symptoms, they should be permitted to run their course; if anything is needed from the practitioner it is only to assist nature. A free emetic of ipecac will not unfrequently be the only remedy required, or a free purgative may answer the same end. But should the disease run on and continue to weaken the patient, then the indication is unquestionably to suppress the aqueous discharges; the best means for accomplishing this end is the use of some of the common astringent tinctures, which may be combined with a small quantity of tinct. opii. camphorata, or common tinct. opii. Acetate of lead is a valuable remedy in this disease, especially in combination with Dover's powder. The almost specific action of the ipecac and opium, in controlling fluxes from the body, bloody or serous, is too well known to demand any comment. Opium alone was frequently followed by excellent results, especially in cases in which there was fear of inducing or increasing gastric irritability. Caution is required in the administration of this all-powerful remedy, lest, by too speedily sup-

pressing a diarrhœa, a more malignant disease be induced. A remarkable circumstance is, that this disease became more and more untractable, often refusing to yield to the milder remedies; each month demanded an increase of the size of the doses. Now I do not intend to convey the idea that this expectant treatment was the one generally adopted by us—such is not the case. So great was the tendency of this disease to run into dysentery, and a matter of so much importance was it, in an enemy's country, where we were at any moment liable to be called into active service, to preserve the strength of the soldier, that it was necessary to administer to the very first symptoms to prevent the supervention of inflammation, and also to prevent the rapid loss of strength occasioned by the serous discharges. Diarrhœa depending upon ulcerations, metastasis, &c., demands remedies addressed especially to such causes. In all cases of diarrhœa antagonism of the skin is to be attended to.

Dysentery, another of the same family, and by far the most important, is too often, by the inexperienced, confounded with diarrhœa, while in fact, scarcely any two diseases are more radically different, their only points of resemblance being that they are both affections of the alimentary canal, and are both characterized by frequent stools. Diarrhœa is a discharge of unnaturally thin faeces unaccompanied by fever; in dysentery there is but little or no fæcal matter and that which is evacuated is in small hard lumps, mucus—and a mixture of mucus and blood constituting the character of the discharge—and always more or less fever. Diarrhœa *may be* attended with griping and pain, whilst griping, tenesmus, and pain are universal symptoms in dysentery.

Among its most prolific sources with us were climate, season, vicissitudes of temperature, wet, exposure, unwholesome food, violent exercise, malaria, diarrhœa, and other intestinal diseases. It is useless for me to go into a description of the modus operandi of these various causes; every one knows that diarrhœa produces a predisposition to dysentery, by inviting an increased afflux of blood to the intestinal canal, and

that the various other causes exert their influence in equally manifest and simple ways. As to malaria, I cannot say positively, whether or not it produces dysentery by its direct agency, though I believe it does. I have frequently seen dysentery alternate with intermittent fever or partake of a regular intermittent type, for which I am unable to account except by the direct agency of malaria. Again, statistics, as appears from our books, shew a vast increase in this disease when in malarious districts. That it produces dysentery, by its secondary effects, cannot be denied; any cause which engorges the internal organs, spleen and liver, will also engorge the lower intestines, and any cause which will engorge that portion of the intestines, will predispose to dysentery. The liver by being engorged has also to secrete a larger quantity of bile, the natural intestinal stimulus.

Dysentery is not a contagious disease so far as I have seen it; true it is, that it sometimes appears epidemic, but that must be ascribed to predisposing cause existing in the atmosphere at the time. I have seen, through the campaign, men affected with dysentery sleeping in the same tents, using the same blankets, and eating the same food as their messmates, yet the latter seemed no more prone to the disease than men who were free from any such proximity, or beyond any such other means of contagion.

The *symptoms* of dysentery are, fever, thirst in the first stages, hard and frequent pulse, hot skin, first furred and then a red and glazed tongue, accompanied with rapid diminution in the volume of the pulse; tenderness on pressure, acute pain subject to exacerbations and diminutions, very frequent and sometimes almost constant inclination to go to stool, with a sensation that something is just ready to be voided, tenesmus, griping occasionally, dysuria, &c. The post-mortem phenomena (if correctly reported, for of these I have no personal knowledge) are inflammation and frequently ulceration of the lower portion of the colon and rectum, thickening of the mucous membrane, morbid vascularity of the mesocolon, sometimes perforation by ulceration and sometimes mortification

of the portion of the intestinal canal already indicated as the seat of the disease.

The symptoms and post-mortem phenomena of this disease shew it essentially an inflammatory disorder; the *treatment* is consequently antiphlogistic. If the case be of recent origin, and there is reason to believe that the exciting cause still remains in the stomach, (if it be dependent upon such cause) then the same indication and mode of removal as in diarrhœa, is probably the most speedy method of relieving it, to-wit: by an emetic; if it be in the intestinal canal and out of the reach of an emetic, a full cathartic will probably remove it. The administration of an anodyne and aperient alternately is a practice frequently followed by much success; an anodyne and aperient administered conjointly seem to produce their separate and distinct effects, without at all antagonizing. If aperients are demanded at all, as unquestionably they are, it is in the forming stage; the removal of all foreign matters from an inflamed surface is always demanded under all circumstances. I can safely say that this treatment is a good one from my own experience. The administration of mercury was with us the "*great treatment;*" so common was it that dysentery was connected with portal derangement that the rule, in every case, was to give mercury—the exception, not to use it. Blue mass combined with Dover's powder or even opium, was considered and acted almost like a specific.

How the disparity of opinion among authors, as to the use of mercury, could have arisen, I cannot see; certainly those who oppose its use never had to treat dysentery in a tropical climate. With us there were but few cases which demanded bloodletting, this probably depended upon the fact that treatment was generally instituted in the forming stage. Opium should be cautiously administered in the inflammatory stage; it is too apt to mask the more prominent symptoms and lull the practitioner as well as patient into a state of false security. Anodyne injections are very excellent remedies especially in that stage, in which, after the violence of the attack has been subdued, the tenesmus, pain, and strangury still exist. Care

should be taken that there be not too much starch or mucilage of whatever sort, of which the vehicle is composed, lest its presence excite the act which it is intended to control. Counter irritation is a valuable remedy after the inflammatory stage is subdued; if applied during the height of the inflammation, blisters are rather inclined to propagate than control the inflammation. In chronic cases their use is indispensable.

The greatest attention should be paid to diet, which should be scanty and antiphlogistic; during convalescence also this is to be kept in mind, but it may be more nutritious. Antagonism of the skin is also an important consideration in the treatment of this as well as of other abdominal diseases. Clothing should be abundant and woollen next to the skin; this is a very valuable item—so valuable is it considered that many of the soldiers are permitted to wear nothing but flannel next the skin. The patient should preserve the recumbent posture; every exertion is followed by disagreeable symptoms. The tepid bath in the inflammatory stage is good treatment. Tonics are indicated under two circumstances: first, when there is a recent tendency with intermittent fever, or any tendency to intermittent symptoms. I have seen this disease assume a regularly intermitting type and obstinately resist all treatment until combined with quinine. They are, secondly, indicated when the system has been much prostrated by the disease, and is deficient in elasticity or recuperative energy.

A remedy which I have rarely seen fail, when almost all others had, is nitric acid gtt. viij. elixir vitr. ℥ss. and tinct. opii ℥iss. in four doses; the ingredients in this compound fulfil many different indications.

The introduction of the finger of the patient into the rectum is recommended by an old and experienced practitioner, as an excellent means of controlling tenesmus. I have never seen it tried.

Passing from the province of medicine proper to that of surgery, a brief notice of wounds will close this paper.

Notwithstanding the many untoward circumstances which surrounded us, such as the drenching rains which almost uni-

versally succeed battles, vicissitudes of temperature, inadequate protection and almost entire want of hospital accommodation, in which our army is radically deficient, as well as in medicines and instruments, which had prepared us for the worst, I am happy to say that all ordinary wounds in sound constitutions healed as promptly and kindly as could have been desired, though in broken down and weak constitutions I think there was probably more sloughing and that convalescence was not as speedy as it would have been under more favorable circumstances. A fact which I may as well notice here is the remarkable rapidity with which maggots were generated. Wounds dressed on one morning were found on the succeeding to contain great numbers of these animals. If a dressing was allowed to remain on, or great care was not taken in cleansing the part, in 48 or 56 hours they were found collected in incredible quantities, and of enormous size, frequently as large as a small goose quill and from 3 to 9 lines in length. They were productive of no little pain from the irritation they produced in the parts, their tendency to burrow between divided muscles, and the great horror manifested by patients at their presence. As to their origin, there was much diversity of opinion. That they were produced by actual deposition from the fly, was hardly probable, since there were very few flies of this kind about the tents, and the wounds were entirely protected from their contact in many instances in which they occurred. It was held by some that the egg of the fly had been deposited in the dressings previously to their application; that this was not the fact, I am satisfied, since scalding the dressings, saturating them with turpentine and such other alternatives did not prevent their production; my own opinion is, thatthey were of spontaneous generation, of which, I think, I have abundant evidence. It not unfrequently became very difficult to to remove them from extensive wounds, from their tendency to burrow, especially when they took an upward direction, in which the means used for their destruction could not follow them. The means employed for this purpose were turpentine, chloride of

sodium or lime, creosote, &c.; these generally succeeded in destroying one growth, but did not prevent its speedy replacement by another. From their position, I have frequently been compelled to remove them with instruments.

Gun shot wounds are of great extent and resemblance to almost every other variety of wounds. They resemble punctured wounds in progressing in the line of the force of the wounding body, are always more or less contused at the entrance, and lacerated at the exit, though there are sometimes exceptions to this, and are more commonly complicated by the presence of foreign bodies than all others combined. Great care should always be taken in examining such wounds. If there should be no foreign matter in sight as will frequently be the case, and the track of the wound be obscure, a probe should be carefully used; this will not unfrequently detect the foreign matter and enable you to remove it; much injury may result from a neglect of this important particular. Lead is probably the least irritating of all foreign bodies with which wounds are likely to be complicated. Should a ball therefore be deep seated or imbedded in bone or tendon, so as to offer much difficulty to its removal, it should be permitted to remain; nature remedies such evils by encysting. Pieces of clothing, patching of balls, hair, &c., are very rarely encysted; if they be not removed and sloughing set in you must cautiously watch for them; all attempts at curing a wound when thus complicated will prove abortive and fruitless. Extensive and dangerous abscesses are not unfrequently the consequences. There is rarely much hemorrhage in these wounds, the arteries seem enabled to slip by the offending body, which is generally of globular form. The general indications of treatment are perfectly plain, the same as in wounds of any description. The cold water dressing for the first few days is an excellent application, especially if too much inflammation be suspected. Nitric acid lotions and stimulating poultices, hasten the detachment of sloughs. A most excellent ointment is composed of rhubarb ℥ss., opium gr. xv. and simple cerate an ounce; this fulfils all the indications—astringes, allays pain, and affords sufficient

stimulation. A bandage, carried from the extremity of the injured limb above the seat of injury, is a valuable means for controlling muscular action, which is always an important item. Should too much constitutional irritation exist, purgatives leeching or venesection, will generally control it. Should a tonic treatment be required, which is most generally the case in extensive wounds, (though they are both sometimes necessary during the course of the cure) then alcohol is indispensable; quinine and iron in its various preparations are also precious remedies. The different bitters are also of much value, if the preceding remedies cannot be procured.

Amputation.—This important operation is too often heedlessly performed in the army. Our surgeons, relying on British authority, amputate when there still remain many chances for the recovery of the limb. The case may have been different with the half starved, dilapidated British soldier, to what it is with our robust, healthy, well-fed soldiery. Secondary amputations in Europe may have been followed by fatal consequences, but in this country I am convinced there is but little more risk in trusting a good constitution to a secondary than to a primary operation. Therefore, I say that no surgeon is justifiable in depriving the patient of so important a member, by a primary operation, when there is a possibility of recovery, if there be left to him the alternative of a secondary operation. This may be done, I repeat, only when from the position or extent of the wound a secondary operation would be inadmissible. Of 23 operations, which I witnessed in Mexico, six were secondary; of these only one died; the remaining 17 were primary, and three died; which, though on a small scale, shews the mortality to be nearly equal. The most evil consequences which I have witnessed to arise from secondary operations, were that the convalescence was slower and the drain upon the system very much greater. I will relate two or three cases in which amputation (primary) was decided upon, all of which recovered.

A. T., a privte in the 1st regiment of Mississippi volunteers, received an extensive wound in the knee, destroying the pa-

tella, a large portion of the inner condyle of the femur, and exposing the joint to a fearful extent; he refused to submit to an operation, and when I last saw him he was going about on one crutch. A private in the 1st Tennessee regiment had a compound comminuted wound of the radius and ulna, made by an escopet ball; recovery seemed almost impossible; he also refused to submit to an operation; he was so far convalescent when I last saw him, as to be able to use his hand in eating, washing his face, &c. The next, a very interesting case in more points than one, was that of L. Y. of our own regiment: he received an extensive contused and lacerated wound of the thigh, destroying all the muscles on the external and posterior region of the thigh, also some of the contiguous on the anterior portion, which exhibited when cleaned off a wound extending from the trochanter major to within three inches of the knee, and encircling about two-thirds of the limb. The patient was one of weak constitution and at the time somewhat emaciated from the diseases of the country (diar. and int. fever). The bone was not injured though denuded for three inches above the middle of the wound. Amputation at the hip joint was decided upon by almost every one who saw him. Dr. C. rather dissented, though probably, more from the knowledge of the patient's constitution and supposed inability to stand an operation, than from a hope of saving the limb or life of the patient. The operation was not performed. Dr. C. was taken ill and there were no instruments suited to the operation. The treatment was tonic from the start, the sloughing process went on slowly. Required constant stimulating poultices and lotions—a healthy ulcer of the dimensions given above was finally presented, the granulating process went on tolerably well. This was one of the cases in which maggots were so abundantly generated. During its course the case was complicated with a masked intermittent fever, which yielded to quinine which was after this time continued as a tonic. The case was also complicated with erysipelas, which was controlled by two applications of iodine. During the existence of these complications the ulcer assumed

that peculiar glazed appearance which is so peculiar to ulcers when they cease to secrete. The tender cicatrice also ulcerated during these complications. The patient is now enabled to go about with a cane—the cicatrice is very tender.

February, 1848.

Art. II.—*Removal of a large Encephaloid Tumor.* By W. L. Sutton, M.D., of Georgetown, Ky.

On the 24th of April, 1846, I was desired to visit a negro woman aged 50, belonging to Dr. W. G. Offutt, of Woodford county. I found, occupying the right mamma, a large, exceedingly painful tumor, soft to the touch, and giving a sensation strongly resembling that of fluctuation—so strongly indeed, as to have induced a neighboring physician to introduce a lancet to discharge pus. None, however, was discharged. Dr. O. himself, on the day preceding my visit, had punctured the tumor in two places with the same result. Subsequently to the last punctures, a small quantity of pus was discharged from the one first made. The surface of the tumor upon the top, and for a considerable distance down the sides, was smooth and of a dark red color; approaching the chest this color gradually changed to that of the natural color of the skin. The dimensions of the tumor were as follows:

Circumference at the base,	19¼ inches
" 3 inches from the base,	17½ "
Measure diagonally over the tumor in the direction of the lower edge of the pectoralis major	14⅜ "
Measure over its smallest bulk	11 "

From the orifice of the first puncture, a fungus was protruding about the size of a partridge-egg, of a color resembling brain with many red papillæ on the surface. The woman was much emaciated; had not been able to sleep for several months on account of the excruciating pains in the tumor;

pulse 110 and irritable; no appetite, but the bowels in tolerable order.

I had seen this breast once, about 18 months previously, when the tumor was much smaller, had considerable firmness —no approximation towards a sensationof fluctuation—was not discolored or painful.

I directed the tumor to be suspended as much as possible; the patient to take at night, calomel grs. 15 with a fourth of a grain of sulph. morphia. The same dose to be repeated on the night of the 27th; the calomel to be purged off on the succeeding day with rhubarb if necessary. A fourth of a grain of sulph. morphia to be given each intervening night.

29th. Visited her again; found her decidedly more comfortable. She had been able to get some quiet sleep under the influence of the morphia: pulse had come down to about 100, and of a more quiet character. The first incision now presented a fungus with a base somewhat larger than the transverse section of a hen's egg. A fungus of a similar character now protruded from each of the other punctures.

Although there was little to promise ultimate success, we determined to remove the tumor. Having administered two grains and a half of opium half an hour previously, we (Dr. George C. Sutton and myself) proceeded to the operation. Two elliptical incisions were made parallel to the long diameter of the base, including all that portion of the skin which we considered important to remove. The base of the tumor was then dissected from the walls of the thorax. About a pint of blood was lost: three arteries required the ligature. Upon laying down the flaps, we found a surface, 1½ inches by 4, uncovered by integuments. This was dressed with lint spread with cerate. A fourth of a grain of sulph. morphia was directed to be taken every night at bed time; small doses of calomel and rhubarb every third night.

May 7th. The flaps have united by the first intention: there is nothing to indicate the location of the ligatures (which were of catgut, and cut off close to the knot.) A considerable portion of the lower end of the raw surface presents a rather

pallid fungous appearance. Otherwise the appearance is good: pulse 90, sleeps tolerably well, appetite improved—is cheered with the prospect of recovery. ℞. solut. sulph. cupri to the fungous surface. Continue the morphia at night; cal. and rhubarb occasionally; attention to diet and bowels.

29th. The surface healed over, except a space an inch long by half an inch wide; this looks very well. General health very much improved. From this time she steadily improved: the surface soon skinned over, and she is now, April 1848, in good health.

Upon laying open the tumor after its removal, it was found to consist of a soft mass very much of the consistence (perhaps less firm) and color of brain: around this was a slight, condensed substance, this might have been considered a cyst, or a condensation of cellular membrane, according to the fancy of the observer.

Remarks.—I think there is little reason to doubt that this was a genuine encephaloid tumor. If so, the result has been more satisfactory than I was prepared to expect, and consequently the prognosis of such tumors as at present made, *may be* too gloomy. Upon a careful examination of the case before the operation, I was of opinion, that without the removal, the patient would live but a short time—that with it, her life might be prolonged a few months, but that diseased action would soon reappear and carry her off.

April, 1848.

Art. III.—*Cases of Tubercular Phthisis, with Remarks.* By John R. Buck, M.D., of Louisville, Ky.

Tubercular disease of the lungs is so generally regarded as incurable, that many physicians are strongly disinclined to undertake its treatment; indeed, it is often declared to be prejudiced by any treatment, and patients are advised to avoid

both physicians and medicines. The failure to recognise this disease in the early stages, previous to the softening of tubercular matter, is doubtless the cause to which is mainly referable the opinion that it can neither be cured nor stayed in its progress. If it is recognised before the foreign matter (for so we must regard tubercle) excites that degree of inflammation in the surrounding structures as to render suppuration inevitable, I entertain no doubt but that the disease may generally be arrested and frequently cured. The object of this communication, however, is not to discuss the curableness of phthisis in its different stages, but merely to give a very brief and condensed report of several cases, to show that it may be benefitted and sometimes entirely arrested, not to say cured, after tubercle has softened and been expectorated.

Mrs. F., æt. 31 years, requested my attendance in December 1842. Her father, two brothers, and a sister, had died of tubercular consumption; also her husband; since that time another sister has died of the same disease. She is tall, very spare, with dark auburn hair and beautiful, clear, white skin. She had not been confined to her bed at all, but had been much debilitated for some months, and within the last few weeks previous to my seeing her, had had more or less dry short cough, shooting pains through the chest, with very slight fever in the evening. I found slight dullness at the summit of the left lung, with increased resonance of the voice and feebleness of the continuous murmur; no other evidence of disease in any part of the chest. In a few weeks softening of tubercular matter occurred as shown by the general symptoms and physical signs, as well as by the presence of tubercle in the expectoration. Local depletion was practiced several times at the summit of the chest anteriorly and posteriororly; after which an issue was established in the same vicinity and kept open for six months,—discharging freely the greater portion of the time: so soon as the issue began to discharge freely, she was placed upon a syrup of the iodide of iron (℥i. of the iodide to ℥i. of pure syrup); of this a tea spoonful was given morning, noon, and night, one hour before each meal. This was the

general plan of treatment. In May 1843, she had so improved that I ceased to attend her: since that time (it is now April, 1848) she has had no return of the pulmonary disease whatever, and is in good health.

H. D., æt. 46. I first visited this patient in January 1845. There was no family predisposition to phthisis. In 1831 he had profuse hemoptysis coming on suddenly, while talking in an ordinary tone of voice to some friends, and at a time when he thought himself in perfect health; this returned occasionally for a month or six weeks, since when, there has never been the slightest appearance of blood in the expectoration; his general health continuing good until December 1844, when he contracted catarrh. When I first saw him, he was somewhat emaciated, complained of great weakness, loss of appetite, cough, night sweats, hectic fever, and frequent chilliness. At the summit of the right lung, and for two inches below the clavicle, there was well marked dullness. Bronchial respiration and broncophony in the same limits.

The application of cups below the right clavicle seemed for a time to arrest the disease entirely; in a few weeks however, having been slightly exposed in bad weather, he was taken with increased cough, shooting pains through the chest, and more febrile action; this train of symptoms was followed in a few weeks by distinct chills, copious night sweats, cavernous rhonchus, and tuberculous expectoration. An issue was established one inch below the clavicle with the Vienna paste, and the following prescription made:

℞. Quiniæ Sulphatis, ℈ij.
Hyoscyami Ext. grs. x.
M. ft. Pil. No. 20.

Two pills every night at bed time.

℞. Ferri. Iodid. Syrupi, ℥vj.

A teaspoonful one hour before each meal, in a little flaxseed or slippery-elm mucilage.

To relieve nausea and eructations which were occasionally

troublesome during the course of the disease, the following was given.

℞. Argenti Oxyd. ℈j.
Acaciæ Mucilaginis, q. s.
Ft. Pil. No. 20.

One pill morning and night.

The whole body was thoroughly sponged with alcohol at bed time every night. This patient was discharged about the middle of April, having regained his strength, and flesh. and being to all appearance free from disease.

W. I., æt. 22. consulted me first in the summer of 1844. He had been examined by several eminent physicians of New Orleans, all concurring in the opinion that his lungs were tuberculous; he had had repeated attacks of hemorrhage from the lungs,—had several after he came under my treatment. All the physical signs as well as general symptoms of tubercular disease of the lungs were well marked. The same general plan of treatment was adopted in this case, and with the same result:—the young man recovered and is now to all appearance, and as he feels, in perfect health.

It must not be supposed however, that I have been thus fortunate in all such cases, or even in a majority that have come under my care; not so; a very small proportion only have terminated favorably, and I now enter upon the treatment of phthisis, after the tubercle begins to soften with but little hope of very materially arresting its progress, and none of curing it. If, however, it is even possible to arrest the disease in this advanced stage, it is not only important to know it, that we may give every patient the benefit of this possibility, but it also teaches us that in the earlier stages we may with some confidence hope for a permanent cure.

April, 1846.

REVIEWS.

Art. IV.—*Principles and Practice of Surgery.* By the late Geo. M'Clellan, M.D. Edited by his son, John H. B. M'Clellan, M.D.; Philadelphia. Grigg, Elliott, & Co., 1848: pp. 432, 8vo.

The subjects treated of in this volume are the following: *the immediate effects of injuries upon the system, constitutional irritation, the effects of injuries upon the blood-vessels, erysipelas, furunculus, anthrax, abscesses, ulcers, burns and scalds, the effects of cold, wounds, tetanus, hydrophobia, poisoned wounds, syphilis, morbid growths, non-malignant tumors, malignant growths in general.* All of these subjects being comprised in the space of four hundred and thirty pages, it is evident that some of them are treated with a brevity by no means commensurate with their importance.

Under the first head are discussed the *immediate* effects of injuries on the nervous system in the form of *shock*, which may be confined to the parts injured, and the parts beyond in a peripheral direction; or may be felt by the nervous system of the whole body, and vary from slight disturbance to protracted and fatal collapse of the vital forces. The most dangerous form of shock, save that which overwhelms the individual at once, is termed by the author *insidious;* not more than one patient in a hundred recovers from it.

"A great joint has been torn open, a terrible compound fracture is present, or several of the large muscles and nerves have been lacerated, and yet no corresponding disturbance is

manifested. The skin continues cool and transpiring; the tongue clean; and the secretions natural. Such cases may be compared to those which occur in the outbreak of yellow fever and other epidemics. Patients will be seen walking about, and perhaps attending to their regular duties, until the very moment when they drop down and die. During the epidemic typhus, or spotted fever of New England, the people fell down at the plough-tail, at the spinning-wheel, and the grist-mill. In one of our earlier yellow fever ravages, Dr. Rush met a friend walking the streets, with death depicted on his countenance, and had only time to accompany him home, and see him expire. During the cholera of 1832, a carpenter, who was carrying his tools to a workshop, was caught up by the police officers, because they saw the livid hue of his asphyxiated face, and dragged struggling to the nearest nospital, where he died, protesting that he would go back to his work.

"These may well be denominated cases of *insidious* shock. The symptoms are deceitful enough. Perhaps from the very suddenness and intensity of invasion, the springs of nervous energy are cut off—the foundations of life are undermined, and no further elaboration of the great principle of innervation can be effected. The actions of the system are allowed to go with apparant tranquility, until they wear down or exhaust all the power that has been stored up, and the forces sink into annihilation.

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"The only symptom in addition to the above detail of circumstances upon which an intelligent surgeon can depend in the diagnosis of this kind of shock, is a semeiological one. The countenance of the patient is altogether unnatural. It presents an inquiring, anxious look about the forehead, eyes, and upper portions of the face, while all about the mouth and lips is smiling and composed. It resembles the mixed sad and cheerful expression which our great novelist, Dr. Bird, has attributed to Montezuma in his captivity, and by which some authors have attempted to characterize the whole of our aboriginal race—a melancholy smile about their lips, indicative of their fatal proclivity to destruction. There is another circumstance about the expression of the countenance, which will strike an intelligent observer. When you first approach the bed-side, the patient will look at you with a stare of alarm and suspicion; and he will repeat this expression constantly as often as you approach him to make any inquiry. No matter how long you remain in the room, whenever you attract his attention, his forehead will be drawn up, and his

brows contracted into a scowl of suspicion, mingled with anxiety."

A more remote effect of injuries is *irritation*, which comes after reaction from shock, and even where no shock has been experienced. The hurtful impression is transmitted to the cerebro-spinal axis, and thence is reflected over all the functions of the body, constituting *general* or *constitutional irritation;* or through the same reflex action of the nerves, the results of this hurtful impression may be exhibited in some one organ more than another—as in the brain, by delirium, morbid vigilance, nervous apprehension; in the urinary organs, by paralysis of the bladder or suppression of urine; in the stomach, by nausea, and vomiting especially of undigested matters; in the liver, by arrest or perversion of secretion; in the heart, by palpitation, pain, great quickness of pulse; in the nervous system, by spasm and pain.

In the next section, on the effects of injuries on the blood-vessels, the author treats of inflammation. Here, as indeed everywhere else in the book, John Hunter is appealed to as the authority *sine qua non*. Dr. M'Clellan thinks that we have made no advance since Hunter's time; the microscopic anatomy of the present day, although he refers to it on all occasions, is considered by him as mere folly.

The best section under this head is that on senile mortification. The description of it, as it occurs in old gouty subjects, with ossification of the arteries, is as follows:

"A sensation of numbness or torpor, accompanied by an occasional prickling or neuralgia pains, and cramps of the muscles above, usually precedes the development of dry sphacelus, in the last extremities of one of the members, and symptoms of constitutional disturbance are also in most instances complained of. The patient has not been able to sleep quietly for some days; he has been anxious and restless, with loss of appetite and a sense of distress at the epigastrium. Chills or shiverings sometimes supervene, and a painful sensation of coldness and debility is complained of in the extremities. If the sphacelation appears before reaction, as it sometimes does,

it is apt to make considerable progress before the patient or surgeon is made aware of it. Instead of a small black spot, as authors describe its beginning, a whole toe, and sometimes two or more will be found dead and shrivelled. This form is the real dry gangrene, and it may progress to a considerable extent before any degree of reaction occurs. But in the majority of cases an erysipelatous, or gouty redness, attended with a great deal of pain and sensation of burning occurs in the part before it mortifies. Indeed vesication occurs previously, and often the whole foot swells as in genuine gout. This is especially apt to be the case when the disease is excited by an injury, as from cutting the nails or corns, or wearing tight shoes, or exposing the part to sudden vicissitudes of temperature. The gangrene in these cases is sure to be humid, except at the very points or last phalanges of the toes, which may shrivel and become hard. The nails, however, speedily fall off, and leave the parts below and above moist and putrid. Most cases of this disease are excessively painful, especially when the gouty or inflammatory kind of reaction accompanies it. Although the torpid and uninflamed cases present nothing but a prickling numbness and slight neuralgic feelings which anodynes and stimulants can readily allay; those arising from, or complicated with, irritative inflammation of the parts above generally excite more distressing and excrutiating pains than any other disease in nature. The effects of large doses of opium, when prescribed by the celebrated Pott in such cases, were so admirable in the way of overcoming pain, and checking the progress of the disease, that it was denominated all over England, at one period, Pott's gangrene. Before the publication of Pott's treatise on this subject, bark and wine, and the most nutritious articles of food had been universally resorted to, for the cure of senile gangrene. He revolutionized the practice in a great measure, and ever since large and frequently repeated doses of opium with farinaceous food, and no stimulation, have been chiefly depended upon."

The cases accompanied with little or no irritation, will not be so amenable to Pott's treatment. In these, mild stimulants, nutritious food, and tonics, with warm and stimulating applications locally, succeed best. In the severer cases when opium is required, the author thinks it acts most beneficially when given in dry hard pills of solid opium. Not being readily dissolved when thus given, "it passes down below the stomach

and applies itself to the nervous extremities over the whole mucous membrane of the bowels, and thus produces a composing effect upon the solids, with an inferior degree of narcotism exerted upon the brain and circulation." The truth is, we suppose, that when thus given, it is more stimulant than narcotic; the slow solubility of the "dry hard pill," rendering it equivalent to smaller doses of other forms, supporting the vital actions, instead of suspending them in narcotism. But opium or its substitutes, hyosciamus, stramonium, camphor, &c., are not the only remedies.

"Large doses of turpentine, of naphtha, or of creosote will often relieve miraculously after every other internal remedy has failed. By affording the requisite degree of diffusible stimulation to the nervous system, and rousing up the energies of the enfeebled capillaries, they appear to answer every indication in certain cases, which ought to be characterized for the benefit of practitioners. The cases to which allusion is here now made, all present the peculiar phenomenon of the patient holding the affected member in a depending position. No matter how bad and inflamed the parts may be, the limb will be held downwards, and frequently it will be impossible to prevent the sufferer from exposing it to the full blaze of a fire. It would appear as if the obstructed state of the arteries leading to the affected member, or their impaired condition of vitality prevented the free access of blood to the limb, and, therefore, required the aid of gravity and of warmth to promote the necessary access of blood into the capillaries. The minuter vessels and their controlling nerves being called on to make increased efforts to pump, as it were, the circulation through enfeebled arteries, necessarily generate the accompanying pain and irritative inflammation. The increased pressure of the column of blood from above, under the force of gravity, relieves them from the necessity of making such extraordinary efforts, comforts the irritated and exhausted nerves, and explains the advantages of a dependent position of the limb. The influence of warmth in some cases, and of internal carminative and diffusible stimuli, can also be satisfactorily explained on the same principle."

By and by the warm emollient applications, that seemed thus to appease irritation and promote the access of blood

have to be laid aside; they favor tumefaction and infiltration, and the mortification advances rapidly under their use. But at the same time the dependent position of the limb becomes hurtful, and the patient must be placed on a sofa, or in bed, with the feet elevated. Cooling and astringent applications will now afford comfort; and benefit will be derived from bandaging, the skin being previously blackened by the nitrate of silver. When the gangrene is arrested, amputation may be completed, through the line of separation where nature has begun it; but, according to the author, never in the soft parts above. The successful cases of the latter sort which have been reported, he thinks have been mistaken. In illustration of the phenomena and treatment, of this disease, he subjoins notes of several cases: we quote the following:

"Some years ago I was called to see the late R—— C——, Esq., near Middletown, in Delaware. He was an old gentleman, about sixty-five years old, who had been a large farmer and hearty liver. I found him sitting before a hot fire on a low bed, leaning on his knees and holding on to both his feet, which rested on the floor. He was howling and shrieking with pains which no anodyne or topical remedy could relieve. It was impossible to keep him on the bed for a moment, and it had been so for nearly three weeks since his first attack. On examining his feet I found them excessively irritable and flushed over the insteps from the toes to the ankle. One of the toes on one of the feet, and two on the other, had become black and dry at the tips, and dark vesications had begun to form around their roots. His tongue was dry and furred, his skin hot, and his stomach oppressed and nauseated. His pulse could hardly be distinguished at the wrist or the ankle, for his arteries there were partially ossified. His femoral arteries were ossified also; and I had to ascertain the condition of the circulating powers from the temporals and carotids. His pulse in that way distinguished, proved to be quick and irritable but not strong. I found his bowels had been very torpid for some weeks, and no ordinary cathartics had proved sufficient. The evacuations procured by medicines had all been watery or scanty and tarry. I, therefore, recommended a twenty grain dose of calomel, in combination with twelve grains of rhubarb, which was afterwards repeated, and followed by oil and turpentine. Large evacuations of

consistent fæces followed, to the great relief of the febrile excitement. I then blackened the whole feet, toes, and ankles, by repeated applications of nitrate of silver in solution (twenty grains to the ounce), and enveloped the affected toes in basilicon mixed with creosote. The result was a great immediate relief of the pains, and a marked subsidence of the general irritation. Opiates afterwards composed him to a reasonable extent, so that he could sleep in a horizontal posture and enjoy a tolerable protraction of his existence. Although he continued to suffer the dependent position of his legs in the daytime, still, under composure from opium, he could lie in bed over night, and thus he dragged out his existence of a few months longer, until he died without amputation."

In the succeeding chapters, on erysipelas, furunculus, and anthrax, we do not observe anything new. Under the head of gangrenous erysipelas is described a low form of inflammation, leading rapidly to purulent infiltration, destruction of texture, and mortification, occurring especially in laborers, who drink deeply, and eat largely of coarse unhealthy food. In all the severe forms of erysipelas, the author recommends free and deep incisions, and speaks highly of steam or vapor baths. Furunculus is discussed in thirty-five lines; anthrax in less than thirty!

In the section on abscesses, speaking of diffusion or infiltration of pus, he says:

"As soon as the presence of matter is detected by the sense of fluctuation, and an erythematic puffiness of the skin, the incisions should be made, and whenever the diffusion is very great, as along the whole extent of the thigh or forearm, counter-openings should be made at the opposite ends, as well as in the centre of the collection. Soft and porous, or sleazy cotton bandages should then be bound around the whole limb, so as to make equable compression. Openings should then be made through the bandage directly over each incision, and soft poultices or moistened pieces of flat sponge applied over the orifices. The matter, as well as the detached portions of sloughs, will thus be forced out through the orifice, while the opposite sides of the cavity will be compressed together at the same time by the bandaging. In this way an immense sav-

ing of time and suffering will be effected in the closing of the abcess."

Collections of pale, watery fluid, are designated by the term *lymph abscesses.* These may be connected with a lymphatic gland or vessel, but are not necessarily so; nor do they always imply exudation of fibrinous fluid. The term is very loosely applied. The collection may occur in the thighs or arms of relaxed and leucophlegmatic subjects. The following is a case of the kind.

"One enormous distension of this case occurred more than two years ago, in a corpulent washerwoman in Carpenter street. She was a mulatto, of about 45 years of age, but nevertheless she was decidedly leucophlegmatic in her temperament. One of her thighs was prodigiously distended, from the knee to the groin, with a sub-facial and intermuscular fluctuating effusion. She was taken to one of the Dispensaries after I had seen her, and an exploring puncture made through the vastus externus muscle. A gush of lymphatic fluid explained the nature of the case at once, and convinced the pupils that no cerebriform fungus was present."

An unhealed puncture of a lymphatic vessel gives rise to a small collection of this sort. Sometimes the fistulous opening in the vessel is congenital. The following case occurred in a young lady of seventeen.

"A very small, and almost imperceptible orifice existed in the skin directly over the anterior margin of the sterno-mastoid, in the middle of the neck. A common bristle could hardly be inserted into it, and it resembled very closely, one of the empty cutaneous follicles. A very small drop of transparent lymph could almost always be seen over this orifice, and every few minutes it would trickle down like a tear. On rubbing the neck with a slight pressure, especially upwards, this discharge would be considably augmented; and I took advantage of this to collect a few drops in a teaspoon. The fluid underwent an imperfect or flocculent coagulation, as I have found always to be the case on repeating Magendie's observations upon the lymph when extracted from the vessels of living animals."

The application of a red hot wire, or a pointed piece of lunar caustic, will generally procure obliteration of the orifice.

In the section on *congestive abscesses* there are some instructive cases detailed, of collections of matter connected with organic disease of the viscera—especially with obstruction at the ileo-cœcal valve, or ulceration and perforation of the colon. These abscesses in some instances are formed in the retro-peritoneal cellular tissue, and open like lumbar abscesses about the loins, in the thigh, or travelling over the spine of the ilium, appear on its dorsum. In other cases the collection takes place in the cavity of the peritoneum, and is circumscribed by the effusion of fibrin; these the author calls "circumscribed cold abscesses of the peritoneum," and directs attention particularly to them. We give a few of the cases, which will be found interesting.

"My excellent friend, Dr. Samuel Tucker, called me in consultation, some years ago, to see the son of a hatter in second street, about seventeen years old, who, after being troubled with obstinate costiveness for a long time, and colicky pains in the left iliac and lumbar regions, finally exhibited a deep seated fluctuating tumor projecting out towards the back part of the same lumbar region. I detected an abscess there, and on making a deep incision just in front of the quadratus lumborum muscle, a large quantity of very fetid pus escaped. A large lumbricoidus worm afterwards escaped through the orifice, and the odor of fecal matter for a long time exhaled from it. But, finally, the abscess closed, and the bowels were no longer subject to derangement.

Dr. Charles Schwartz lately called me in to a similar case, which occurred in the person of a German tailor, in Race street. After having been ineffectually treated for eighteen days, by a homœopathist, for inveterate constipation and pain in the left lumbar region, which was mistaken for nephritic calculus, he sent for Dr. Schwartz, who at once detected a deep seated tumefaction in that region. He resorted to active antiphlogistics, cathartics, and injections, but could not prevent the tumor from suppurating, although he succeeded, to some extent, in evacuating the bowels. I opened the collection just in front of the anterior margin of the quadratus lumborum muscle, and evacuated a very thick offensive pus, after which the bowels resumed their natural functions, and all the pain subsided."

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"In the year 1825, I was sent for, to introduce the catheter

for a Mr. Thomas, in Filbert street, who was supposed to be laboring under a retention of urine. I found him with a large fluctuating tumor in the regio pubis precisely like an over distended bladder, and he complained of all the symptoms of a painful retention. I therefore introduced the catheter, as I thought fairly into the bladder, but not more than a tablespoonful of high colored urine escaped, and as the symptoms were not at all relieved therefrom, I introduced the left index up the rectum, where I found what seemed to be an enormous distention of the lower fundus of the bladder. On making percussion upon the swelling in the regio pubis, I could distinguish a palpable fluctuation, through the swelling felt in the rectum, and I could not doubt that the bladder was over distended. Still the catheter was in the bladder, and no more urine would escape. On withdrawing the catheter, it was found to be unobstructed by coagulated blood or any other substance. I afterwards introduced a larger one on my next visit, but the same result followed. The next day Dr. Physick visited the patient with me, and introduced a silver catheter with the same effect. He then carried his left index as high up against the lower fundus of the bladder as possible, and forced up the catheter so as to be certain of its full passage into the bladder. In doing this, he felt some barrier giving way before the point of the catheter, and the patient, at the same instant, cried out that he felt his bladder tearing. On withdrawing the catheter, blood for the first time appeared in its eyes and cavity, and we were persuaded it must have made a false passage. The ensuing day, the doctor repeated the same effort ineffectually with another catheter, and he, therefore, directed me to tap the vesical tumor above the pubes. When I had introduced a trocar, to our astonishment, a sero-purulent fluid escaped instead of urine, and the collection proved to be a large circumscribed abscess of the peritoneum, gravitating down into the cavity of the pelvis, and floating around the bladder, or rather the empty bladder floated within it. In a few hours the man died. He was a young man twenty-three years of age, the son of Mr. David Thomas, a very respectable citizen. We found, on careful inquiry, that he had swallowed a date stone about two years before, and ever after complained of feeling it lodged in his right groin. For about two weeks before I first saw him, he had been attended by Dr. Gillingham for colic and constipation, and after the application of a large blister, the swelling of the lower part of the abdomen had appeared and stranguary had supervened. Ineffectual efforts had been made to relieve the stranguary, by warm baths and opiates,

and Dr. G. was obliged to leave town, when I was called in, on account of his own health. On examining the body, we found a large mass of coagulated lymph, partly organized around the appendix vermiformis, and the veritable date stone lodged within the cavity of the appendix and but slightly projecting into the cæcum. The exhalation of puriform matter had originated there and gravitated downwards. Surrounding barriers of adhesion had formed between the intestines and the lining of the abdominal walls in front, and the abscess was confined to the lower part of the umbilical, the hypogastric, and the pelvic regions. It was the lower part of this abscess which we had felt through the rectum, and mistaken for the distended lower fundus of the bladder. The free serous surfaces, looking into the abscess, were everywhere thickened and opaque, and incrusted with a scaly or broken false membrane of coagulated albumen or fibrin. The injury which the catheter had done to the bladder consisted in the forcing of its point into the orifice of the right ureter, where it had torn up the mucous membrane to a considerable extent and allowed some of the urine to infiltrae under it, so as to puff it up like a blister."

Dr. M'Clellan divides ulcers into nine varieties: the healthy, inflamed, irritable, indolent, varicose, scrofulous, phagedenic, sloughing, and specific. How long will our books on surgery continue these perplexing and unscientific divisions?

In the case of wounds about the hands and feet, he objects decidedly to the practice of cutting down upon the principal artery of the limb in order to arrest hemorrhage. In the whole course of his practice, he has met with but two cases where it was necessary to take up the radial artery, and four or five where it was necessary to take up the tibial arteries. Pressure, properly applied, or dilatation of the wound and ligation of the bleeding vessel, have always proved sufficient.

In connection with gun-shot wounds, several interesting cases are detailed.

"In Mr. Cameron's case in Lancaster, when he was shot apparently through the body by a musket ball, I was called out the same night to consult with my friend, Dr. Atlee. We

found that the ball had traversed round the abdomen, across from the right to the left side, glancing under all the muscles, probably without laying open the peritoneum. The ball was extracted by Dr. Atlee just under the skin, where it had attempted to make an exit, and the whole track and last orifice healed without suppuration. The abdomen however became tumid and painful from the local shock or contusion, and required active depletion and purgatives for relief. The orifice of entrance was very small, and readily healed."

"In the case of Mr. Griswold, the U. S. mail agent, who fell under my care for three bullet wounds, received in the night, at Bristol, in 1835, the muzzle was held within a yard of his face, and one ball entered the alæ of the nose, and passed through the nostril into the substance of the second cervical vertebra, whence it was afterwards dislodged; the second passed into the orbit of the eye, on the same side, through the lower lid, just escaping the bony edge of the orbit, and passed back into the sphenoid bone, where it still remains; and the third struck the front surface of the upper jaw bone just below the orbit, and passed back into the tuber maxillare, where it still remains embedded. He fell, after one partial reaction, into a secondary stage of overwhelming shock, which persisted for some hours. He had no hemorrhage, except a little from his nose and throat, nor any pain or fever afterwards. The nerves of special and common sensibility were entirely paralyzed on that side, and have never since recovered any power. But the muscular expressions are all perfect, and the scars of two of the wounds, the first two, are hardly visible. They healed like incised wounds; but the third orifice being contused against the body of the upper jaw bone, sloughed at its edges, and left a deep scar."

A valuable lesson is taught in connection with the next case.

"Nothing can be more reprehensible than to disturb the dressings of a wound in which a hemorrhage has been arrested. As long as the parts are dry and quiet, let them alone until the subsequent discharges begin to loosen the dressings. By that time the processes of adhesion will have permanently closed the orifice in the wounded artery, and prevented all secondary hemorrhage. During the riots in Southwark, I dressed a horrid canon-shot wound in the right groin of a young soldier from Germantown. He had been struck there with a

broken piece of cast iron, with the fragments of which one of the cannon in the hands of the mob had been loaded. The whole fore part of the fleshy substance of the groin, in contact with Poupart's ligament, had been torn away, and a prodigious rent made across the artery, with a hole in the vein. He had flooded the floor, on which he lay, with gore, and was deadly faint when I arrived. It was late at night, and the rioters were all around. I, therefore, applied graduated compresses, and bound them down with a spica bandage. But it required two hours constant nursing, with his head and shoulders in my lap below the bedside, and the incessant use of cordials and brandy, to revive him. During his reaction the poor fellow was delerious, and wanted to go home. He had no return of hemorrhage, however, and by morning I got him so far recovered, as to have him transported, in a carriage, to one of the hospitals. There, however, somebody stripped off his bandage and pulled away the compresses, to see how I had dressed the wound! The blood gushed out in a torrent, and the second fainting process carried the patient off to a better world."

The section on syphilis is the only one in which the author demurs to the authority of Hunter. On this subject he subscribes to the doctrines of Carmichael. He thinks with him that "there are four specifically distinct kinds of disease resulting from as many distinct poisons;" and further that his "nosological arrangment and nomenclature are consistent with the facts and explanatory of the errors of Hunter." Accordingly he treats of papular, pustular, phagedænic, and scaly or true syphilis. The distinct existence of the latter has been conclusively established by Ricord, and Dr. M'Clellan does not doubt "that others will finally be established on equally strong data."

"It is impossible form the very nature of things, that septic poisons should not vary. The elements and products of secretion vary in the different parts of the same complications of organs, even in the same sex; and when we take into consideration the commixture of these secretions, after irregular and promiscuous intercourse between the most filthy and negligent of both sexes, we can experience no difficulty in concluding, that the chemical or putrefactive reactions which take

place among them, must be productive of diversities of animal poison. Each form of the virus on being generated, may continue to be propagated for an indefinite period by contagion: or it may finally wear out or be lost for want of means of communication; and then a new species be formed afresh from another concomitance of circumstances. In the same way we may conceive of a number of contagions going on collaterally at the same time, through different members of the same community, although not mixing with each other respectively."

Touching specifics in this disease, he says:

"It may appear disheartening to some who have cultivated medicine on empirical ground, to learn that no antidote or real specific has ever yet been discovered for any form of syphilis. Everything that has ever done good has produced its curative effects on the same general principles which govern us in the management of other diseases. A well regulated diet, bloodletting, purgatives, diuretics, and especially diaphoretics and alteratives, have all been brought under contribution with complete success, in the different stages and forms of syphilis. The aborigines of this continent were proverbially successful in their treatment of its worst shapes, by the use of simple diaphoretic herbs and roots, aided by the vapor bath. In fact the so long celebrated decoction of the woods, as they are called was originally borrowed from the Indian practitioners near the earliest settlements on this continent. Alteratives, the class of remedies perhaps most extensively depended upon at present, produce their beneficial effects not merely by changing the actions of the solids, but also by influencing the secretions and exhalations so as effectually to eliminate the poison from the system. Mercury is only one of this class of remedies, and its great and peculiar advantage, as we shall see, consists in the fact, that it possesses extraordinary powers in dispersing chronic indurations and quickening the action of the capillaries. In all cases where there is a want of indurated or unorganized lymph, or where the capillaries are in an over excited state, the alterative impressions of mercury will prove positively injurious; and then a simple course of diaphoretics, aided by appropriate antiphlogistics or tonis, as the state of the system may require, will prove as decidedly curative as any searcher after specifics can desire."

Mercury is not merely inapplicable, but positively hurtful, in the papular, pustular, and phagedenic varieties, both in the primary and secondary forms. In all stages of the *scaly* syphilis, the true syphilis of Hunter and Ricord, it is "peculiarly appropriate, not because it possesses any antagonism to the infecting virus, but simply in consequence of the fact that the chronic and unirritated form of the symptoms indicate such a condition of the system, as is found appropriate to the favorable influence of mercury in all other diseases." In the true syphilitic bubo, a longer use of mercurials will be required than for simple chancre; and sometimes pressure, caustics, and blisters "will be necessary to facilitate the action of mercury upon the indurated base and edges of the consecutive ulcer." Dr. M'Clellan is not very partial to the proto-iodide of mercury; he prefers the old favorites of the profession.

Of the treatment of the *phagedenic* syphilis the author says:

"Since the publication of the earlier editions of Mr. Carmichael's work, a very great improvement has been made in the treatment of the primary symptoms of phagedena. Instead of the temporizing treatment recommended by him of bloodletting, fomentations, poultices, antimonials, purgatives and opiates, we now proceed immediately to destroy the whole morbid surface, by potential cauteries. A bridge of basilicon ointment is smeared around the edges, and over the surface of the neighboring skin and then lint dipped in pure nitric acid is applied firmly over the sloughing or corroding surface. Emollient poultices afterwards speedily detach the sloughs and present a suppurating and granulating surface. In short, this efficient plan of treatment at once converts the diseased into a perfectly healthy ulcer, and protects the constitution from all contamination in most cases. The secondary eruptions being accompanied with much febrile reaction, always require depletion at first, and generally, in the form of bloodletting and purgatives. Antimonials and diluents afterwards come in as adjuvants, and finally, sarsaparilla with Dover's powder, or other sudorifics. The ulcers on the skin should be cauterized with caustic potass at their morbid edges and surfaces from time to time, and emollient poultices of slippery elm applied until the surface becomes healthy. Afterwards

soap cerate, or Turner's cerate, spread on lint or linen will speedily effect cicatrization."

According to the author this disease was very common in Philadelphia in 1818–19 and 1820, and again in 1827–8, but has since been less frequently met with. He details several cases that occurred in his private practice. The first of these he treated in 1829 in the person of an Irish school-master named Kelly, a young man of temperate habits and of sound constitution. This case first led him to regard favorably the doctrine of the distinct origin of the disease. The other cases are thus detailed:

"At the White Bear Inn, in market street, within half a square of Kelly's schoolroom, and where I know the poor fellow had been in the habit of eating his dinner in ordinary, or, at least, occasionally, the then proprietor of the house, Mr. Caldwell, first sent for me to see a black and painful spot on his prepuce, which had broken open, or, as he said, burst the night before and discharged a bloody sanies and a very offensive odor. I immediately discovered the first stage of sloughing phagedena, and having shortly before seen Mr. Welbank's paper in the Medico-Chir. Transactions, I tried his plan of treatment by applying the concentrated nitric acid. This succeeded like a charm. The moment the slough which it caused came off under a flaxseed poultice, a crop of healthy granulations shot out and repaired the breach. This succeeded in preventing all secondary disease, as it has done in every other case in which I have seen it tried as early after the exposure. But as soon as Mr. Caldwell had got well, one of his boarders, Mr. G. W. J., a wholesale shoe dealer in market street, took his bed and sent for me. He was a perfectly healthy and respectable young man, of twenty-six years of age, accustomed to no kind of dissipation. About a week after visiting the same chambermaid, who had certianly infected the landlord, and probably the poor schoolmaster, he began to experience a distressing pain in the inner side of his right thigh just below the groin, in which region he soon detected a black speck or tubercle. This rapidly enlarged, cracked open., and discharged an offensive bloody matter. He had consulted the nearest apothecary, who gave him some balsamic mixture to apply on patent lint, but before I saw him the slough had extended to the size of half of one of his

palms. I lost no time in applying a piece of patent lint, cut to the size of the whole surface, and dipped in pure nitric acid. A surrounding bridge of basilicon ointment protected the sound skin, and a poultice afterwards detached an enormous slough from a subjacent healthy ulcer. After this ulcer had healed without the development of buboes, I was confident that he would escape secondary symptoms; but unhappily, in about three months he came to me with fever, and large wheals or tubercles on his forehead, face, breast, and shoulders, which scabbed over like rupia, and were followed in some points, by enormous phagedenic ulcers. His throat and nostrils ulcerated, the spongy bones exfoliated, his joints become painful, the whole category of symptoms laid down by Carmichael supervened. I had consultation on consultation with my professional friends, sent him to the sulphur springs, the sea-shore, and the country. But he finally died, after three years suffering, with marasmus and perichondrial swellings about the larynx, without any injurious course of mercury ever having been instituted. A few carefully conducted trials of an alterative course, at the suggestion of some of my consulting friends, failed in affording any more than plliative relief even in the declining stage of the symptoms."

We have seen two cases of this disease: one was in a youth of fifteen; the other, in a very robust healthy looking man of twenty-five. The latter had lost the prepuce, and about two-thirds of the glans penis, when we saw him; he recovered, under the application of nitric acid and poultices, without further mutilation of the organ; but what is his subsequent history we do not know. There was nothing in the habits or general health of either of these patients to account for the character of the disease. It could only be referred to something peculiar in the virus.

Dr. M'Clellan does not agree with Ricord and his followers, that mercury is inapplicable and iodine exclusively beneficial in *tertiary* syphilis, or "in the secondary symptoms of the second order of parts," as Hunter phrases it. Iodine is a good adjuvant of mercury, "but no practitioner has ever yet found it possible to dispense with the truly heroic remedy in the last and most protracted form of syphilis. Even in the last or declining stages of the other forms of venereal diseases, for

which mercurials are universally considered inappropriate, the same combinations often come in as successful remedies." Iodine and sarsaparilla seem, he says, to have the power of depriving mercury of its most injurious properties; but iodine can only be substituted for mercury in those irregular and anomalous affections thought by Hunter to be allied to scrofula. Arsenic, in some instances, has done more good than either iodine or mercury.

The proportion of cases in which secondary symptoms occour after cure of indurated chancre by mercury is, according to Ricord, eighty-six in a hundred. Dr. M'Clellan thinks that in this country the proportion is about fifty or sixty in a hundred; and he asks if the difference is not owing to Ricord's constant practice of inoculation. He also brings forward some instances to show that the remote or tertiary symptoms of Ricord may be transmitted from the father to the children without intermediately affecting the mother.

The last subject treated of in this volume is that of *tumors*, the discussion of which occupies more than a hundred pages. The author makes two divisions, non-malignant and malignant. The first includes encysted, cystoid, sarcomatous (embracing adipose sarcoma and fibrous tumors,) cartilaginous, and osseous tumors (exostosis, spina ventosa, and osteo-sarcoma); the second includes scrofula, scirrhus or carcinoma, medullary cancer or medullary fungus, and melanosis or black cancer.

This is not offered as a complete or scientific arrangement, but one which subserves the purposes of discussion. A good many notes, containing accounts of some of the author's operations, are given in this part of the volume, and we shall confine ourselves mainly to these. Under the head of encysted tumors, we have the following account of an operation for *hydrocele of the neck.*

"A most interesting case of the so-called *hydrocele of the neck* presented itself to the author, about four years ago, in the person of Mr. T.—, of Kentucky. The disease had commenced many years before, and during the last two preceding his arrival here, had increased so rapidly as to cause consider-

deformity, and to interfere somewhat with respiration and deglutition. The tumor gave the appearance of a uniform œdematous-like enlargement of all the parts adjoining the thyroid body. The skin pitted under pressure, and an indistinct feeling of fluctuation was communicated to the fingers of each hand when pressed upon the opposite sides of the enlarged space. It was pronounced to be a cyst, containing a watery fluid: and an exploratory puncture was made by introducing a a narrow bistoury over the edge of the sterno mastoid muscle. At least a pint of a thick greenish serous fluid, tinged with blood, escaped; and an injection into the sac of warm water brought away a number of albuminous flakes through the aperture which was then closed. Two days after the operation, the wound had united, but the sac had filled up to its former size, and seemed to be much inflamed, whilst the difficulty of breathing had increased. During the whole of the succeeding week, he had much pain and uneasiness in the part, and suffered from severe, and even alarming, constitutional irritation. At the end of that time, however, more distinct fluctuation being perceived on the side opposite to the former puncture, a free incision let out a quantity of bloody serum, to the great and immediate relief of the dangerous symptoms. From this time, he continued to improve rapidly, and free suppuration throughout the sac resulted in its complete obliteration.

"He returned to Philadelphia within the last year, and, upon examination the parts were found to be still somewhat enlarged and indurated—but there was no return of the fluid collection. Frictions of iodine ointment, with repeated leechings, and a long course of alteratives, almost entirely removed this induration, which was nothing more than the remains of the closed sac, and restored his neck to nearly its natural shape."

Dr. M'Clellan objects to the use of the seton in these tumors, as producing excessive inflammation, and says he has succeeded better by making free incisions and then applying nitrate of silver to the inner face of the cyst. Theoretically, the seton is more manageable than incision and cauterization, and we are much inclined to think it would be so practically. We have seen it successfully used in one case.

In connection with cholesteatoma we have this remarkable case:

"Some years ago, I was called down to Milford, in Delaware, to visit the late Col. P——, then confined to his bed with a singular complication of diseases. He had strictures in the urethra and rectum, stone in the bladder, with diseased prostrate, and incipient cataracts in his eyes, besides two large malignant and ulcerated lupuses on his cheeks. But the worst of all his affl ctions proceeded from a pendulous white or pearly-looking tumor, about two inches long, which hung down from the posterior half arch of his soft palate on the left side, and fell upon the top of the larynx. This kept up a constant sense of suffocation and difficulty of deglutition. The poor old gentleman could never repose, not even for an instant, in the recumbent posture. He had to be propped up on pillows, with the left side of his head and neck downwards, so as to prevent the tumor from falling by gravity into the larynx. I excised the tumor with immediate relief to his most troublesome and dangerous symptoms, by means of a hook and blunt-pointed bistoury. It had a narrow pedicle, and was pyriform in shape, resembling, very closely, a single large pearl glass pendule of the ear-ring sometimes worn by females in vulgar life. It was entirely destitute of vessels, and covered with a very thin transparent membrane The firm and lamellated cholesterine of which it was composed, looked precisely like opal or iridescent pearl, as it hung within the throat. This was a genuine cholesteatoma. He had large indolent ulcers on his legs, both of which were also covered with a thick coat of shining white cholesterine, evidently of the same character as the contents of the pendulous sac in the throat."

Dr. M'Clellan has the credit of demonstrating fully the practicability of extirpating the parotid. He removed the entire gland in eleven cases; in one, the patient "sank under coma in the fourth day after the operation, from the effect of the ligature around the common carotid artery;" in another, the patient died three years aftewards from return of the disease. The subjects of the remaining cases are still living.

The editor has also extirpated this gland, for an immense tumor involving the pneumo-gastric nerve, which was divided without any untoward results.

We find the subjoined case in the section on cartilaginous tumors of the bones.

"One remarkable case occurred to me, about eight years ago, of an enchondroma in the interior of a flat bone. The Hon. Mr. Allen, of Cleaveland, Ohio, then a member of the U. S. Congress, brought his son to me, a fine lad, of about seven years of age, with a broad swelling in his left temple, which had been for eighteen months gradually enlarging, and attended with a troublesome determination of blood to the head. It had been pronounced an incipient exostosis of the skull by some distinguished practitioners in other cities, and the little fellow was brought to me to undergo an operation. On a careful examination, I found a gradual rising of the external table of the lower portion of the parietal bone over a large circular space, of about two and a half inches in diameter, with a prominent and elastic portion in the centre as large as a twenty-five cent piece. This was destitute of a covering from the external table of the skull, and felt like a fibro-cartilaginous tumor with three peculiar fixed and hard lumps in its substance, which I compared to round-headed nails standing up through the elastic mass from the firm internal table below. As the disease was then making progress, and threatened the integrity of the cerebral powers, I consented to the wishes of the parents, and undertook the operation. After dissecting away the angles of a triangular or T-like incision, and exploring the pericranium, I revealed the surface of the fibrous mass as it was exposed in the centre of the swelling, from which the entire substance of the external table had been removed by absorption. I then made a circular incision around the whole circumference of the tumor through the external table, with a small circular Hey's saw, and pryed away the bony crust included within this circle by an elevator. On dissecting up the flat and firm tumor which was then exposed from the internal table of the bone below, I had to saw off the three bony knots or studs I have alluded to, from the internal table. The whole tumor was then fully detached, and proved to be chiefly fibrous with cartilaginous deposits among all the interstices. The three knobs were eburneous or ivory-like exostoses, and the whole substance of the exposed tabula vitrea at the bottom of the wound proved to be composed of radiated or stellated fibres of eburneous and shining spicula. I therefore carefully cut through these by the gentle application of a small Hey's saw, and raised and completely detached them from the dura mater below by the forcéps and elevator. The main branch of the middle temporal or meningeal artery bled freely, and I was obliged to secure it with a fine ligature. The flaps were then reapplied,

and contracted speedy adhesion to the dura mater, and the little fellow left town for his home in three weeks, with a soft pulsating space in the situation of the wound, but with no symptom of inconvenience. The disease has not returned, and I hear that so much ossific matter has been re-deposited below the scalp as to suppress the pulsations there completely."

The shining and ivory-like fibres mentioned in this narration, sometimes form under the surface of scirrhous and even fibrous tumors, and, according to the author, ought always to be removed.

Some of Dr. M'Clellan's most important operations were for excision of the ribs, and the removal of the whole or a part of the upper and lower jaws. In the latter cases, he has never found it necessary to tie the carotid as a preliminary step. We hold that it would be mal-practice in most of such cases; the only good it can do, is to enable a surgeon to say that he has tied the carotid a certain number of times—a most pitiful piece of ostentation.

We quote the author's remarks on the general treatment of cancer.

"Although the constitutional treatment of carcinoma usually resorted to by the profession, consists chiefly of alteratives and tonics, a considerable variation from this course is frequently required in particular cases. In the earlier stages, before the peculiar cachexia has been manifested, it is always best to alleviate the irritation by a well regulated diet, combined with laxatives and occasional diaphoretics. As long as there is any degree of plethora, or vascular excitement present, it will be best to confine our patients to vegetables, farinaceous food, and milk diluted with water. Great attention to cleanliness, and warm clothing, should be observed. The flannels should be changed and aired every night and morning, and ablutions with warm water should be practised every morning before putting on the dress. Often great benefit will be derived from a general sponging with warm water acidulated with nitro-muriatic acid followed by frictions before retiring to bed at night. By such means the cutaneous transpiration will be constantly maintained in a state of healthy

vigor, which is most essential to the counteraction of all malignant growths. After the constitution has begun to flag, and the symptoms of cachexia have supervened, the use of light and digestible animal food will be required in combination with the farinacea, and the vegetable tonics. If any tendency to anemia, hower, be manifested, chalybeates will become the best invigorators. The carbonate of iron in full doses, combined with small proportions of rhubarb and ginger, or aloes, will in general prove the best formulæ."

Locally "the application of leeches from time to time to allay vascular engorgement and irritation, the use of cooling and astringent lotions at first, and of mild sedative plasters afterwards," constitute the palliative treatment. By combined local and general means much may be done to check the progress of these formations; and it is in the chronic not the acute stage that the knife should be used.

With these extracts we leave the reader to form his own judgment concerning this volume. We have purposely abstained, save in one or two instances, from anything like criticism either of the matter or the manner. Still we must say that we do not regard it, like one of our contemporaries, "as an original, philosophical treatise on surgery," or as evincing any very "profound learning" on the part of the writer. It is to be regarded—and we beg the reader to bear this in mind—not so much as a grave treatise as a reproduction of the author's extemporaneous lectures, delivered some years ago in one of the Philadelphia Colleges. Its style is that of the lecture room rather than the closet; and its faults, we would fain believe, are those of the lecture room rather than the closet. Besides the intrinsic evidences of this, we have the direct avowal of the author that in its composition "he was obliged to shut himself up for an hour or two at a time, and reproduce his former train of ideas and facts as he was in the habit of giving them extemporaneously in the lecture room." It is then this "former train of ideas and facts" with the changes wrought by lapse of years; it is his lectures as they would be now if they were now to be delivered—a re-

production of them, with a slight (and in some cases very slight) incrustation of later knowledge, gleaned from later reading and experience. As such, then, the reader must recollect that these pages lack the speaker's look and tone, his appropriate attitude, his impressive gesture, his rapid and impetuous flow of language—in a word, that, with much of the *abandon* of the lecture room, they lack all the nameless attributes of the living lecturer, and all the nameless attractions of an attentive audience. C.

ART. V.—*Materia Medica and Therapeutics:* By MARTYN PAINE, M.D., Professor of the Institutes of Medicine and Materia Medica in the University of New York, etc, : S. S. & W. Wood, 1848. pp. 411, 8vo.

Dr. Paine's indefatigable pen has produced another book. the objects of which are thus set forth in the preface:

"1. To arrange the *Materia Medica* upon intelligible, physiological and therapeutical principles.

"2. To indicate the relative therapeutic value of the various articles, under their different denominations, by arranging them in the order of their value.

"3. To give to the student a comprehensive and ready view of the merits of the various articles composing the *Materia Medica*, and of their relations to each other, physiologically considered. The *arrangement* itself is also indicative of the pathological and therapeutical principles which lie at its basis. The work was originally designed, therefore, as a *Compendium of Rational Therapeutics.* With these objects in view, the author has now connected the work throughout with his INSTITUTES OF MEDICINE by *references* to the latter, and has introduced a variety of other practical matter which does not occur in his "*Therapeutical Arrangement*," but which seemed conducive to a more amplified work on Therapeutics. It is especially recommended to the student that he should examine the References which are made to the work on the *Institutes of Medicine*, as they may fall incidentally under his notice."

Thus the author himself has to some extent set limits to the

circulation of this volume. To the young gentlemen attending his lectures it will prove a convenient and useful work. The usual pharmaceutical statements, and the physical and botanical characteristics of plants, are omitted. A very full index is provided, and this with the table of contents, which is itself a synopsis of the author's arrangment, will make the reference easy. The poetical motto, from Burns, seems to us a little far-fetched and fanciful; and the dedication is certainly more truthful than tasteful. C.

Art. VI.—*An Analysis of Physiology:* being a condensed view of its most important Facts and Doctrines. Designed especially for the use of students. By John J. Reese, M.D., Lecturer on Materia Medica in the Medical Institute of Philadelphia; Fellow of the College of Physicians, &c. Philadelphia, J. G. Auner, 1847.

This book was prepared at the solicitation of the author's class, and in the small compass of three hundred and twelve pages, contains about all that is known in Physiology. It will be found a most excellent companion for those attending lectures on that branch of medicine. C.

Art. VII.—*The Young Stethoscopist; or the Student's aid to Auscultation.* By Henry J. Bowditch, M. D., one of the Physicians of the Massachusetts General Hospital. Second edition. New York; Samuel S. & William Wood. pp. 303.

We are glad to see a second edition of this little work, and we trust that every young student of auscultation will furnish himself with a copy. It is an excellent introduction to the larger works. Dr. Bowditch seems to have right notions of the value of physical signs, and he does not fail to impress his views on the student.

"Amidst the niceties of our physical examinations we are apt to neglect the rational signs. The truth is, that he who scoffs at either must necessarily be a child in the diagnosis of not a few diseases; and he who cultivates both with the clear, keen-sighted eye of a true observer, and then notes their mutual relations, is the truly wise physician. Both categories of signs are useful, each in its own sphere; and neither should be allowed to predominate; neither should be neglected."

This is well and timely said, and breathes the spirit in which the book has been produced. C.

ART. VIII.—*The Obstetrical Remembrancer; or Denman's Aphorisms on Natural and Difficult Parturition, the Application and Use of Instruments, &c.* Augmented by MICHAEL RYAN, M.D. First American from ninth London edition, with additions by THOMAS F. COCK, M.D., Visiting Physician to the New York Lying-in Asylum. pp. 258.

Memoranda on Anatomy, Surgery, and Physiology. By MARK NOBLE BOWER, Surgeon. Corrected and enlarged by an American Physician. pp. 325.

Ophthalmic Memoranda respecting those Diseases of the Eye which are more frequently met with in practice. By JOHN FOOTE, Fellow of the Royal College of Surgeons. pp. 131.

These books are all from the press of the Messrs. Woods, New York, and are part of a series which that house is publishing. They are intended as medical class-books, and are of a size and shape convenient for the pocket. They will unquestionably prove useful to students, and now and then to practitioners. C.

ART. IX—*Lectures on the Phenomena of Living Beings.* By CARLO MATTEUCCI, Professor in the University of Pisa. Translated under the superintendence of JONATHAN PEREIRA, M.D. F.R.S. Vice President of the Royal Medical and Chirurgical Society. Philadelphia: Lea & Blanchard. 1848. 12mo., pp. 388.

In the preface to this volume it is stated, that these Lectures were delivered by appointment of the government of Tuscacany, in the University of Pisa, and that in the space of less than four years they have passed through two editions in Italy and one in France. The author, Professor Matteucci, is one of the most eminent of the savans of Italy, his name having been associated with some of the most interesting questions in physiology and chemistry.

The number of lectures embraced in this volume is twenty. The first is introductory, and treats of the general properties and phenomena of living beings. These phenomena are not all explicable by the general properties of matter, and the action of caloric and electricity. Such a conclusion would be as far from the truth as the inference of those who deny, that living beings are at all under the influence of physical agents. There is something about sensation which the laws of physics fail to explain. But because they cannot explain everything we are not to abandon the analogies which the physical sciences offer us. Every day increases the number of vital phenomena which can be referred to chemical action. "The number of catalytic actions in living beings," remarks our author, "is immense."

The second Lecture treats of *molecular attraction, capillary forces, and imbibition.* The laws of capillarity are detailed at length, and imbibition is shown to depend upon the same force. Many of the phenomena of living beings are examples of imbibition.

Endosmose is the subject of the third Lecture—the mutual action of two liquids on each other when separated by a membrane. If we take a glass tube whose lower extremity, closed by a piece of bladder, is expanded into the form of a funnel, and pour into it an aqueous solution of gum or sugar, after-

wards immersing the closed extremity in pure water, we find that the water continually passes into the tube by filtration through the membrane. The liquid within becomes elevated, and may even flow over by the upper aperture. At the same time, a certain quantity of the mucilaginous or saccharine liquid escapes through the bladder and mixes with the water. Dutrochet has called the first of these phenomena *endosmose*, and the second *exosmose*.

The principles are applicable to living beings. Thus

"Microscopic observation has now put beyond doubt that, in all tissues, whether vegetable or animal, and in those liquids which are produced by the alteration of organized and living beings, there are constantly found, at a certain epoch, microscopic corpuscles, which have a peculiar characteristic form, and are called elementary or primitive cells. These bodies consist of an exceedingly delicate membrane, which has a spherical form, encloses a liquid, and has on its inner side a small organized body, called the *nucleus* or *cyto-blast*. The cells float at first in a liquid, which Schwann has named *cyto-blastema*, and they ultimately become included in, and almost confounded with it, when this liquid acquires a greater or less density. In different tissues, the elementary cells are more or less closely approximated to each other; the *cyto-blastema*, or intercellular substance, being invariably the bond of union between them. The life of the elementary cells certainly plays the most essential part in the development and preservation of the tissues of living bodies; and, since these cells are found under conditions favorable to endosmose, we have no reason for refusing to admit its existence. A vesicle filled with a liquid, and placed in the midst of another liquid, may act on the outer one, receive the surrounding liquor, and reject the one it had previously contained, by operating in a manner analogous to endosmose."

The action of certain medicines—purgatives for example—seems explicable upon endosmotic principles. Poiseuille found that there was endosmose through animal tissues from the serum of the blood to Seidlitz water, and to solutions of sulphate of soda and common salt. And we know this is precisely what happens when we use these medicines internally; the

ejected excrements contain an excess of albumen. In this case endosmose takes place through the capillary vessels of the intestine, from the serum of blood to the saline solution introduced into the alimentary canal. But a still more remarkable fact was discovered by Poiseuille; namely, that the muriate of morphia, when added to a saline solution, very considerably weakens the endosmose from the serum to the solution, and ultimately changes the direction of the current. This corresponds with the constipating effects of opium and its salts, and their action in diarrhœa.

Lecture IV treats of *absorption and exhalation in animals and plants.* It was long a question whether the lymphatic vessels or the veins were endowed with the power of absorption; but Matteucci shows that *all vessels* absorb. Exhalation is effected for the most part, by the same mechanism, and under the same laws as those of absorption. Through the coats of a vessel, capable of imbibing the contained fluid, a portion of it is constantly passing out or exhaling.

"The portion which escapes varies according to the nature of the liquid; that is to say, according to the greater or less facility with which it is imbibed by the tissue of the vessel. In proportion as the sides of this vessel are externally more or less moist, so will the internal liquid flow out with more or less difficulty. The exhalation will be augmented if, in consequence of the very large quantity of contained liquid, the walls of the vessel are subjected to increased pressure. All these particularities of exhalation, which result from what we regarded simply as a physical phenomenon, and which depend on the same principles as absorption, are demonstrated by experimental physiology."

Digestion is the subject of the next Lecture, and the author shows that the act is purely physical—a species of *catalytic action* or *action of contact.* Azotized neutral substances, dissolved in the stomach by the acid liquid, or by the catalytic action of pepsine, pass into the blood merely by the imbibition of the coats of the capillary bloodvessels of the stomach. The digestion of these matters is a mere solution effected by

an action of contact and an absorption of this solution. Water and alcoholic drinks, introduced into the stomach, are also absorbed.

Amylaceous substances are first converted, by the action of the saliva or the pancreatic juice, into sugar, and then absorbed.

"It is singular that this action requires the presence of a free alkali; for, if the pancreatic juice be acidulated, it ceases to act on starch, but, according to Bernard and Barreswil, acquires the property of acting upon the neutral azotised substances. We must, therefore, conclude, that a single organic substance has the property of dissolving fecula and the azotised neutral matters, provided that we add, when we act on the first, a free alkali, and when on the second, a free acid."

Fatty substances suffer no change in the stomach, but after they have passed out of that viscus are absorbed by the chyliferous vessels. Endosmose is one of the causes which promote this absorption, for it is certain that it could not take place, if the inner sides of the intestines were not bathed with some liquid, for which the fatty bodies had an affinity.

"It is easy to demonstrate, by experiments, that the alkaline condition of the intestinal coats favors this absorption. Fill two funnels with sand, equally shaken down in each. Pour into one, pure water, into the other, an alkaline solution; when the liquids have filtered through, pour an equal quantity of oil on each filter. For several hours, the oil will remain upon the surface of the sand, which has been moistened with pure water; whilst in the other funnel, in which the sand has been moistened with the alkaline solution, the oil will rapidly disappear by imbibition."

The subject of the sixth Lecture is *respiration*, in which, however, we find nothing but what has been given by other physiologists. With all the standard writers of the day, the author holds respiration to be a physico-chemical process—that "the gases dissolved in venous blood are set free by the

absorption of other gases; that a portion of the carbonic acid of venous blood is exhaled by the absorption of atmospheric oxygen by this blood; that it is not in the lungs, at least for the most part, that the expired carbonic acid is formed; that this gas exists dissolved in venous blood, and is set free, during the act of respiration, by the presence of oxygen, which is introduced in the same manner as is done by azote or hydrogen in the artificial respiration of these gases: and that, from the experiments of Magnus, it is proved, that the quantity of carbonic acid dissolved in the five pounds (about 6½ lbs. troy) of blood, which traverse the lungs in one minute, is nearly double that which is exhaled in the same time."

The following Lecture treats of *Sanguification, Nutrition, and Animal Heat.* The agency of iron in giving color to blood is investigated, and the result is a doubt whether there is any connexion between the existence of that mineral in the blood and its color. Scherer has recently satisfied himself that he has obtained the coloring matter of the blood entirely free from iron. The following suggestion respecting the action of the blood globules is ingenious.

"The blood globules, making no part of the tissue, though being essential to nutrition, may, with a certain amount of probability, be regarded as the *catalytic* body which promotes the transformation and continual renovation of the tissues. An analogy of this characteristic of the globules is to be found in the necessity which they experience of being charged with oxygen in order to acquire this property."

During the circulation of the blood a continual combustion is going on, in which both carbon and hydrogen, and phosphorus, also, according to Rees, undergo oxidation. Carbonic acid, urea, water and other compounds, result, and heat is necessarily evolved. This is the source of animal heat, according to M. Matteucci.

We pass over the next chapter on the *Phosphorescence* of organized beings, simply remarking that it contains much curious matter on that obscure subject.

The ninth Lecture is devoted to the consideration of the *Electrical current of Muscles.* Not only are heat and light evolved in the living organisms by chemical actions, but electricity also. The following easily executed experiment proves the existence of an electrical current when different parts of the same muscular mass are made to connect by means of a conducting body.

"A frog is prepared according to the usual method of Galvani; that is, we cut it through the middle of its pelvis, separate carefully all the muscles of the thigh, and divide one of the lumbar plexuses as it passes out of the vertebral column. We then have the leg of a frog united to its long nervous filament, composed of the lumbar plexus, and of its prolongation in the thigh, that is to say, of the crural nerve. The frog, thus prepared, and which I have called the *galvanoscopic frog*, is very useful in researches on the electric current. For this purpose we introduce the claw of a frog into a glass tube covered with an insulating varnish, take hold of the tube with the hand, and afterwards bring any two parts of the body, whose electric state we wish to examine, in contact with two different and sufficiently distant points of the nervous filament of the galvanoscopic frog.

"If we take the precaution of not touching the body with any portion of the muscle of the leg, and if the limb be well insulated from the hand, we may be certain that the contraction which the galvanoscopic frog suffers, is due to a current produced in the body touched, and that the nerve only conducts it, and renders it evident by the contraction of the muscle."

The existence of this current is further shown by the following experiment:

"Furnished with a frog, thus prepared, I take a living animal, a pigeon for example, slightly cut its pectoral muscle, after having carefully removed the integuments, and introduce into the wound the nerve of the galvanoscopic frog.

"You observe the contraction of the frog. If you reflect on the arrangement, you will be satisfied that it is absolutely necessary to touch two distinct parts of the pectoral muscle of the pigeon, with two different parts of the nervous fila-

ment. If I apply the extremity of the nerve to the bottom of the wound, and another portion of the nerve to the lips of the wound, or, better still, to the external surface of the muscle, the frog continually contracts. This experiment clearly demonstrates the presence of an electric current, which circulates in the nerve, since it is necessary to form a circuit in which the nerve forms a part. If you have any doubt that the contractions of the frog are really excited by a current due to the different parts of the muscle of the animal, you will soon be convinced, by finding that no contractions are produced when I touch two different parts of the nerve with one liquid, or with a perfectly homogenous conducting body."

What are the sources of this muscular current? Matteucci does not believe it is explicable upon Liebig's hypothesis—the combination of the free acid of the muscles with the alkili of the lymph and blood. His explanation of the phenomenon is as follows:

"The origin of this current resides in the electric conditions which are produced by the chemical actions of the nutrition of the muscle. The blood charged with oxygen, and the muscular fibre, which becomes transformed on contact with this liquid, compose the elements of a pile: they are the liquid acid and zinc. In the normal condition of the muscle, there can only be molecular currents produced by the formation and destruction of opposite electrical conditions in the same points; but if a great number of points of the muscular fibre be put, by means of a good conductor, in communication with others of a different nature, which do not suffer the same chemical action on the part of the blood, the electric current should then circulate. It is this fact, furnished to us by experiment, which proves at the same time the development of electricity in the living muscle, and the impossibility for the electric current to circulate in the masses of this muscle in the natural condition."

We are here compelled to take leave for the present of these instructive lectures.

ART. X.—*On the Farcino-Glandulous Disease in Man.* By Dr. A. MARCHANT, of Charenton, near Paris, France. Translated for this Journal by E. Brooks, Jr. of Boston.

Veterinary Physicians have given the names *Glanders* and *Farcy* to two diseases which appear to have the same origin, but which differ from each other in their external forms and nosological characters. They are spontaneously developed in solipedes under the influence of more or less known causes and can be thence transmitted to man either by contagion or infection.

It was thought until these latter years that solipides alone could be attacked with glanders and farcy—but since the labors of Mr. Elliotson in England, (1) and of M. Rayer in France, (2) all accomplished physicians and veterinarians are satisfied that man can contract these diseases either by the contact of or by cohabitation with glandered and farcied animals. Examples of the disease have multiplied in proportion as it has become better known and new observations of it are daily made public by the medical journals. The contagion exercises itself much more frequently from the horse to other solipedes than from the horse to man—but it is not the less real that it be rare, and this truth has been gained to science by so large a number of facts that it is no longer possible to establish the least doubt respecting it.

What name then should be given to the human glanders and farcy? Shall we adopt the denomination Equinia (4) proposed by Mr. Elliotson, or that of glanders, affection morveuse, (5) adopted by MM. Bérard and Denonvilliers (3). The former indicates the origin and comprehends the two principal forms of the disease but it introduces without an acknowledged necessity, a new term into a science, the glossology of which is already very extensive. The term glanders adopted by MM. Bérard and Denonvillieres is incomplete for it expresses but one form of the disease; it would be more logical to call the two diseases united by the name of the farcino-glandulous disease. Although this denomination be a

somewhat long one, it has the great advantage of designating the whole disease without giving rise to the least equivocation.

I will add that the farcino-glandulous disease is specifiic and contagious, and is produced by the introduction of a peculiar morbid principle—a true animal poison—into the economy.

Specific and contagious diseases present two principal varieties. Those of the first are distinguished by a nearly constant regularity in their march, which enables the physician to foresee and to announce it in its details with an almost mathematical precision—apart from some exceptional cases when these diseases present what is called an abnormal form—variola, rubiola, scarlatina, &c., belong to this category.

The diseases of the second variety, though produced by a like virulent cause, have less of conformity and regularity in their manifestation—thus syphilis, which may be placed in this class, presents (6) primitive, secondary, local, and general, or constitutional affections, which at the first glance appear to be so many particular morbid states, and which are, notwithstanding, only several expressions of the venereal disease.

The syphilitic virus when introduced into the human body produces lesions of the mucous membranes (blenorrhagia, chancres)* alterations of the osseous system (exostosis, osteocopus) inflammation of the lymphatic ganglia. &c., (bubos). The cause of all these morbid expressions is evident, and no judicious physician hesitates to pronounce upon the existence of the venereal disease so soon as one or several of these symptoms shall have appeared.

The farcino-glandulous poison, always identical in its origin and nature, may in like manner produce either glanders or farcy, or what is more common, the two affections united.

This comparison between syphilis and the farcino-glandulous disease had already been made by veterinary physicians, and from the fact that these two diseases present some points of resemblance, they concluded that they were identical, but veterinarians soon perceived their error and are now generally satisfied of the individuality of the disease.

* Lesions of the external tegument (Syphilides, Excrescences.)

MM. Bérard and Denonvilliers appear to partake of the opinion expressed above, when they say (7) "syphilis has numerous relations with glanders, since like it, it manifests itself by pains, tumors, ulcerations and a variety of alterations which are situated in the nasal cavities, the throat, the respiratory passages, the osseous and cutaneous systems."

These resemblances are much more evident when the two diseases are compared intimately together; it is then seen that they offer the same irregularity in the march of their symptoms, and this manner of considering the *f. g.* disease evidently leads to the formation of the following proposition: That farcy and glanders are but manifestations of the *f. g.* poison in the economy—there are two complex symptoms of poisoning, but not two distinct diseases.

In this memoir I shall only occupy myself with the *f. g.* disease in man—such as it has been observed until now by physicians. Science already possesses a large number of observations which when analyzed with care, tend to prove that the forms of this disease as observed by veterinary physicians are not absolutely the same in man. I therefore propose for the *f. g.* disease in man the following nosological classification.

- Farcino-glandulous disease.
  - Acute glanders.
  - Farcy.
    - Simple.
      - 1st. Without chronic alteration of the nasal cavities, and most commonly ending in acute glanders.
    - Grave.
      - 2dly. With chronic alteration of the nasal cavities, (chronic glanders.)

This classification appears to me to be more natural and true than that which physicians have borrowed from Veterinarians. Indeed acute glanders, which has till now been rapidly mortal in man, cannot, consequently, be compared to chronic glanders which rather resembles farcy in its duration and symptoms—this will be amply proved in the course of my memoir.

It is under the form of acute glanders that the greatest violence of farcino-glandulous poisoning manifests itself. Whether preceded by farcy or not, it has till now always proved fatal to the individual affected with it. Farcy is slower in its development, and goes through its periods with more or less rapidity, according to the resistance with which it meets in the organization of man; it destroys and ruins, little by little, and the remissions observed in this disease seem to prepare the organization for the apparition of acute glanders which, generally speaking, ends at once the suffering and lives of our unfortunate farcy patients.

The division of farcy into acute and chronic, should be absolutely discarded, because the signs which serve to establish it are not sufficiently certain, and lead to no important practical results.

Indeed, is it upon the duration of the disease that this dichotomy can be founded? how difficult would it be to determine at what period the acute state ended, and when the chronic state began! Is it upon the march of the symptoms? this again is impossible, since abscesses exist in chronic farcy which take the phlegmonous form. It is wiser then to study and understand farcy in the light presented above, since the divisions heretofore established are sometimes confounded with each other, and are the source of no therapeutical indications.

Farcy is sometimes susceptible of cure; science it is true possesses some rare examples of this. It therefore becomes necessary to admit a variety of farcy uncomplicated with acute glanders. I have called it *simple* farcy, which indicates the disease in a precise manner. Unfortunately the signs which serve to distinguish it from *grave* farcy are not prominent enough to be pronounced upon. But it is to be hoped when once the attention of physicians shall be directed to this point, that more certain means of distinguishing between these two varieties of farcy will be discovered.

The physicians who first wrote upon farcy and glanders borrowed of Veterinarians the theories which they had form-

ed upon these diseases, and they labored to include all cases of the f. g. disease in the divisions admitted by veterinary medicine; but the observations which have been collected of chronic glanders in man differ wholly from the same disease as it is witnessed in horses, in whom it often makes its appearance without, so to speak, altering their general health; they preserve their *embonpoint* and render good service to their owners, who continue to work them as if they were free from all complaint. Now, it is wholly otherwise in man, in whom chronic glanders is never simple and exempt from farcy. In M. A. Tardieu's (8) observations, given as an instance of chronic glanders without farcy, there was an abscess on a level with the fourth metatarsal on the left side, proving in an evident manner the existence of farcy as well, since this disease is characterized in man by more or less numerous abscesses.

NOTES.—(1) Elliotson on the glanders in the human subject; Medico-Chirurgical Transactions, vol. xvi., pp. 1, 171.

(2) Rayer, De la Morve et du Farcin chez l'homme. Paris, 1837.

(3) Bèrard and Denonvilliers; Compendium de Chir. Prat., p. 509.

(4) Mr. Elliotson proposes the generic name of *Equinia*, which then divides into species—Eq nasalis for glanders, Eq. apostimatos for farcy.

(5) I should here remark, for the sake of lucidity, that the French word *Morva* designates in reality the same disease as does the English word glanders; yet that their origins are wholly different. Morva literally signifies *snot*, or in veterinary medicine, that discharge from the nostrils which is peculiar to the disease called glanders. Whereas glanders is descriptive of that enlargement of certain lymphatic *glands*, which is but another symptom of the disease. The French have christened the disease from one, and the English from another, of its prominent characteristics. The English word farcy is a modification of the French word *farcin*, (from *farcire* to stuff), I have therefore rendered the expression *farcino-morvous*, farcino-glandulous.—E. B., jr.

(6) Dict. de Med. et Chir. Prat., tome xv., p. 176.

(7) Compendium de Chirurgic Pratique, tome i,, p. 541.

(8) A. Tardieu, de la Morve et du Farcin Chronique, &c., p. 121.

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

Naphtha in Consumption.—Dr. THEOPHILUS THOMPSON made some remarks at the meeting of the Medical Society of London, (Dec. 20, 1847,) on the use of naphtha in consumption. He had thought it his duty to ascertain, as far as lay in his power, the effects of this remedy at the Consumptive Hospital With this view, having taken proper precautions to get the agent pure, and to give it as described by its admirers, he administered it in several cases. The conclusions arrived at by these experiments were as follows:—In the third stage of consumption it did positive mischief. In a few cases, when the bronchial tubes were affected, and there was much expectoration, it seemed to arrest the secretion to some extent, lessen the night perspiration, make the pulse fuller and slower, and somewhat relieve the cough; the appetite also improved. In all the stages of consumption, and under other circumstances in the disease, except those mentioned, the naphtha did positive harm. It had no effect whatever on the tubercular disease.

Dr. Golding Bird declared that there never was a greater delusion than to suppose that naphtha was a remedy for consumption. He had employed it, with all the care and caution recommended by its advocates, and he had never found it of service. The fact was simply this: the pyro-acetic spirit acted in chronic bronchitis just as did other hydro-carbonates, and no better. The tar-water of Bishop Berkeley had a great reputation in its day, as had also the Barbadoes tar; the fetid gums belonged to the same class, and they all acted as stimulating expectorants to the bronchial membrane. In phthisis,

when a cavity was present, much of the expectoration depended on the condition of the bronchial membrane; and hence the origin of the good effects of this vaunted remedy. To say it cured or arrested consumption was a mere delusion. All practitioners must have observed that any new remedy, from the confidence excited in the patient, did good for a time in chronic phthisis. Dr. Bird then showed the fallacy of the grounds on which naphtha had been established in temporary fame, and alluded to the singular circumstance, that its greatest, and certainly its most scientific, advocate, had died of consumption, his favorite remedy having been persevered in to the last.

Mr. Hird detailed the particulars of some cases of phthisis in which he had been induced to try the effects of the pyroacetic spirit. In no case did he see any benefit from its use. It must not be supposed, however, that the supporters of naptha employed this remedy solely; as extensive counter-irritation over the chest, iron, acetate of lead, and digitalis were employed at the same time, so as to make it difficult to determine which remedy really did good or harm.

Mr. A. Fisher related some cases of phthisis in which the remedy seemed to be of much service; but there appeared to be considerable obscurity in the diagnosis in these instances.

Dr. Willshire had given the remedy in a great number of cases of phthisis. It always did harm, and produced nausea and vertigo after having been administered for a period of a week or ten days. In one case of very doubtful character, it appeared to be of temporary service.—*Lancet.—Am. Jour. of Med. Science.*

On Certain Forms of Headache.—Dr. P. Murphy in a paper on this subject read before the South London Medical Society, (Nov. 25th, 1847.) after alluding to the frequent occurrence of headachh, stated that his intention was to confine himself to the consideration of those varieties originating from disease of bone, or its periosteal covering; from disease of fibrous structures, or rheumatism; from affections of the occipital nerves, or from deficiency or excess of blood within the cranium.

Periostitis of the cranium is scarcely met with unless after a mercurial course, the constitution being almost always scrofulous, and is generally found to invade either the coronal or parietal bones, which the author attributed to their less pro-

tected situation. The diagnosis of this form of headache, although not difficult, has been at times erroneous. The pain is severe, and confined to one or more spaces of the above-mentioned bones: is increased by warmth at night, by stimulating drinks, by exposure to cold and pressure; and a raised surface can be detected by the finger at the spot in pain: and, on inquiry, it will be found that more than one course of mercury has been undergone. It occurs chiefly in men below forty years of age, and in the degraded class of females. The treatment should consist in the application of the Empl. c. Hydr. spread on thick leather, to the part, which both protects it from cold, and removes the effusion of lymph. The exhibition of the iodide of potassium, combined with morphia and tinct. digitalis, is highly useful.

Another form of head-ache, the rheumatic or fibrous, not very common, is located in the tendon of the occipito-frontalis, the temporal aponeurosis, and tendinous insertions of muscles at the back of the head: it is usually preceded by rheumatism of other parts, and is increased by muscular movements. Warm coverings, when they can be applied, usually relieve it; also sinapisms; and, if the pain is very severe, leeches and cupping, and a few doses of calomel with opium, seldom fail to give relief. Gout may also attack the same parts, but be diagnosed by our previous acquaintance with the habits of the patient. In both cases the pain is intermitting, changes its locality, is felt to be external, and the health is not affected.

The next form belongs to the class of spinal irritation, is very frequent, and met with exclusively in females during the menstrual periods, and attacks mostly the left side of the head; the pain is intermittent, shooting, and lancinating; may be fixed for days, and is most severe at the temple (when it is termed clavus hystericus), and next at the parietal protuberance and occiput: it proceeds from the sub-occipital nerve, and, if the exit of the nerve is pressed upon, pain more or less severe is complained of, extending along the whole course or at certain sites only of the nerve—as at the temple, nape of the neck, parietal protuberance, &c.: it is usually increased during the menstrual period, and is generally a complaint of unmarried females between the twenty-third aud thirty-fifth years of life, and is indubitably a form of hysteria. The menses are usually profuse or difficult, the bladder irritable, and there are ill-defined painful sensations about the pelvis; other forms of nueralgia often co-exist. The irritation of the sub-occipital nerve must be traced to the ovaries, being only present where these exist, and while capable of fulfilling the functions

of menstruation; and our treatment must be primarily directed to remove any congestion or irritation of these peculiar organs, and secondarily to lessen the pain of the nerves. The author advises the daily use of hip-baths or sea-bathing where possible; attention to prevent accumulations in the rectum; abstinence from stimulants; mental employment; inf. valerian c. digitalis, with pills of assafœtida; occasionally general or only local bleeding; and, when these fail, a gentle mercurial action, the cold bath being during the time omitted. As local means he recommends belladonna plasters, veratrine ointment, sinapisms, or blistering. Where, however, the patient is exhausted by leucorrhœa or profuse menstruation, with symptoms of chronic inflammation of the womb or ovaries, the treatment becomes more doubtful; but the author prefers the trial of a tonic treatment, and advises the exhibition of the valerianate of zinc and quinine, as especially efficacious, and the sulphate of iron in infusion of valerian when there are evidences of confirmed chlorosis. This head-ache may be termed the *nervous* head-ache: it also assumes another form, which may be termed the *cutaneous* head-ache, and is the hemicrania of our forefathers: it seems to be located in the integuments of one half—usually the left side—of the head which is so exquisitely sensible as scarcely to bear the least touch of the finger, and the pain never passes the mesial line.

Another form of head-ache is that arising from deficiency of blood within the cranium, and coming on after hemorrhages, exhausting discharges, or any other debilitating causes: the best examples occur in chlorosis. It is increased by the erect, diminished by the recumbent posture; is not a very painful form, but is often attended with impaired vision: its cause may be traced to diminished muscular power of the heart, which palpitates on slight exertion: there is also dyspnœa, pale face, and other symptoms of a feeble circulation, with a sinking pain at the epigastrium, and craving appetite. If the true cause of this head-ache is mistaken, and depletion used, paralysis has been known to supervene, but if the debility be removed, the muscular power of the heart is easily increased; and the most useful remedies are, steel by itself or combined with quina, full diet, and the recumbent posture.

The last form of head-ache alluded to by the author arises from excess of blood, and may exist as a passive or congested, or as an active or inflammatory state. The former, arising from the various known causes of congestion, is diagnosed by the constant heavy pain at the anterior part of the head, in-

creased by the recumbent posture, sense of chilliness, slow feeble pulse, tendency to vomiting, and pain in the lumbar region, caused by congestion of the spinal cord. It is a dangerous form of headache, and has in the depressing diseases proved in a few hours fatal, but in other cases has lasted weeks without much mischief. The treatment should be to induce reaction as soon as possible by the warm-bath or an emetic. The author deprecated the usual attempts to arrest vomiting during the invasion of fevers. If the headache persists with hot skin, leeches to the inner nares will be found of value; applied to the temple, they debilitate without relieving this pain of head, and they are altogether inadmissible when this co-exists with typhus or scarlatina. Blisters may also be applied, and diaphoresis produced by the usual means; cold applications to the head, the author considered useless, and even likely to increase congestion. Care was also requisite that mere congestion should not by the use of stimuli be forced into inflammation, which is the next stage if resolution or fatal termination does not take place. The author regarded idiopathic phrenitis as a most rare disease, and hydrocephalus acutus as congestion and not inflammation. Phrenitis was well marked by the tensive pain increased on stooping, by the bright eye, hot skin, nausea, and vomiting, tendency to delirium, and occasional twitching of the muscles of the face; the most active antiphlogistic measures should be used.

There were other forms of headache easy of diagnosis, but of these the author would only mention the constant pain of head in children, with emaciation and want of sleep, and which diagnosed tubercles of the brain. In the headache of pregnant females referred to the centre of the head, and attended with a remarkably slow pulse, and in which if bleeding is neglected, convulsions, abortion, and too often death, are apt to supervene; and lastly the pain of the head occurring after a nights debauch, the cause of which, whether in the stomach or affected organ, the author considered not to have been sufficiently investigated.

The President inquired of the author his means of judging in cases of headache whether the treatment should be depletory or stimulating, as in his own practice he had at times found it extremely difficult to decide, and was often obliged to try, as it were, a tentative treatment.

Dr. P. Murphy thought we should not often be led astray if attention was paid to certain points. If a patient complained of the pain of the head coming on and increasing after getting up in the moring, or assuming the erect position, and relieved

on resuming the horizontal; if troubled with dimness of sight, faintness, perspiration, palpitations on exertion, cramps of legs, depression of spirits, frightful dreams, &c., he concluded a tonic treatment would be useful; headache from congestion is, moreover, a rare disease. In answer to Mr. Wright, his usual practice in clavus hystericus was to commence with tonics, which usually affected a cure. Still in some cases he resorted to cupping at the back of the neck with the greatest benefit, after the former plan had failed. In cases of young females where signs of congestion about the womb existed, leeches to the groins were often useful.

Dr. Sylvester agreed in the value of Dr. Murphy's Diagnostic symptoms, and alluded to the existence of the venous bruit, which, when present, always indicated an anæmial condition of system, and contraindicated depletion, but is benefitted by a tonic plan; as a general rule, he thought it wiser not to deplete in headache. He did not agree with the author that the pain of syphilitic headache occurred generally at the front or most exposed portions of bone; he thought it was more general about the muscular insertions at the back of the neck, and in parts well covered with muscles; there appeared to be an electric attraction in the poison for certain parts of bones.—*London Med. Gaz.—Am. Jour. of Med. Science.*

Recovery from a large Dose of Aconitina.—Dr. Golding Bird in relating to the Medical Society of London (Dec. 13th, 1847) some of the most remarkable facts connected with a case of poisoning by aconitina, stated that he was, from peculiar circumstances, not at present at liberty to allude to more than the actual symptoms presented whilst the patient was under his notice. He was anxious, however, to relate these, because they were not only very remarkable, but had not at present been recorded as the results of poisoning by the alkaloid in question; indeed, no case of this kind has been published, although several exist in which the roots and leaves of the aconite have accidentally produced death. There are few agents more likely to be employed by the secret poisoner, with greater certainty of escaping detection, than aconitina, the terrific power of which in destroying life, even in minute doses, is well known. A few days ago, Dr. Golding Bird was requested hastily to join a consultation on the case of a person holding an important position in society, and of very high intellectual attainments, who, under very peculiar circumstances, had

swallowed some aconitina, which had been procured from one of the most respectable druggists in London, from a prescription of the patient's own writing, he having devoted some part of his time to the study of physic and chemistry, as a part of his very extended education. From collateral evidence, it appeared probable that almost immediately after taking the poison, the person must have fallen, and struck his head a severe blow against some furniture in the room. The poison, or the blow, or both, must have produced immediate violent vomiting, as the room was flooded with vomited matter. How soon he was discovered after this event was not clear, from the peculiar circumstances in which he was placed. An excellent and most intelligent surgeon, and shortly after a physician, were called to him; and about two o'clock in the afternoon, which must at least have been eight hours after taking the poison, Dr. G. Bird met these gentlemen. The patient was then fearfully collapsed; the surface cold and sweating; quite pale; the heart's action scarcely perceptible; pupils acting to light; no paralysis whatever, either of sensation or motion. Notwithstanding the intense exhaustion, the intellect was unimpaired. The most prominent symptom was the repeated and terrific vomiting of a brownish fluid. This vomiting was, however, peculiar, and perhaps hardly deserved that title, the patient really being seized with a kind of spasm, during which he convulsively turned upon his abdomen, and with an intense contraction of the abdominal muscles, he jerked out, as it were, the contents of his stomach, with a loud shout, depending, apparently, on the sudden contraction of the diaphragm. These exhausting and distressing symptoms had occurred every minute or two. On attempting to make him swallow any fluid, a fearful spasm of the throat took place, producing the distressing effects so well known in the hydrophobia from the bites of rabid animals: this was not produced by the sight of water, but the convulsive movements of the body, and emptying of the stomach, were excited by abruptly touching him. He was placed in a hot bath, afterwards removed to bed, covered with blankets, a large mustard poultice applied to the scrobiculus cordis, and an enema of turpentine administered. He remained in much the same state, the sedative effects of the poison on the heart gradually lessening, so that at nine o'clock the pulse was easily perceptible, although weak; the hydrophobic spasms were, however, then produced by every attempt to swallow, so that none of the medicines suggested for him could be made use of. It was therefore determined merely to administer enemata of beef-tea, with the yolk of an

egg, and ten grains of laudanum, chiefly with the intention of procuring rest and giving support. He had a fearful night of exhaustion and spasm; intellect perfect, and even vivid, so as to enable him, whenever he recovered a little from his exhaustion, to carry on a conversation in the French language with an excellent and distinguished clergyman, who shared the task of soothing and watching him, with his zealous surgeon. After this hard struggle with death, this very remarkable man emerged from the effects of the poison: and at two o'clock on the following day, when another consultation was held, he was regarded as convalescent. Dr. Golding Bird drew attention to the fact, that although at least *two grains and a half* of aconitina had been swallowed, yet that the majority of the poison must have been got rid of during the vomiting which followed the injury to the head, resulting from the fall. He also pointed out the remarkable train of symptoms developed, especially the convulsive vomiting and imperfect hydrophobia, as possibly being characteristic of the effects of the poison. For although they differed importantly from the effects of aconite root, with the exception of the sedative influence on the heart, still such a difference becomes intelligible when it is recollected that a pure alkaloid often differs materially in its physiological action from that of the plant from which it is an extract, as shown remarkably in the case of the alkaloid conia.—*Lond. Med. Gaz.*

Use of Ice in Exhausting Diseases.—Some interesting cases are quoted in a recent number of the *Revue Medico-Chirurgicale*, from a French journal, in which ice taken internally seemed to be of great service in reviving powers fast sinking. The writer employs it in very various diseased conditions, providing these manifest the signs of intense debility. The reaction it induces may prove curative in some cases, while in others, in which this is impossible, a marked temporary amelioration of the patient's state occurs. In the cases in question there is great atony and extenuation, and an extreme aversion to any food whatever, with or without a development of heat. A number of morbid states and organic lesions, having no other points in common, may induce this condition. Iced water does not succeed anything like so well as the administration of the ice in little lumps, which by requiring time for their solution ensure its gradual introduction. These impart great tone to the system, and revive the inclination for food in a remarkable manner.—*Rev. Med. Chir.*—*Ib.*

On the Food of Children.—Dr. Thompson, in his "*Researches on the Food of Animals*," after some remarks on the relative quantities of nutritive matter, in various articles of diet, makes the following judicious observations on the appropriate food of children.

"Milk in some form or other, is the true food of children, and the use of arrow root, or any members of the starch class, where the relation of the nutritive to the calorifiant matter is 1 to 26, instead of being as 1 to 2, by an animal placed in the circumstances of a human infant, is opposed to the principles unfolded in the preceding table. In making this statement, I find that there are certain misapprehensions into which medical men are apt to be led at the first view of the subject. To render it clearer, let us recall to mind what the arrow-root class of diet consists of. Arrow-root and tapioca are prepared by washing the roots of certain plants until all the matter soluble in water is removed. Now, as albumen is soluble in water, this form of nutritive matter must in a great measure be washed away; under this aspect we might view the original root before it was subject to the washing process, to approximate in its composition to that of flour. If the latter substances were washed by repeated additions of water, the nitrogenous or nutritive ingredients would be separated from the starchy or calorifiant elements, being partly soluble in water, and partly mechanically removed. Arrow-root may therefore be considered as flour deprived as much as possible of its nutritive matter. When we administer arrow-root to a child it is equivalent to washing all the nutritive matter out of bread, flour, or oat-meal, and supplying it with starch; or it is the same thing approximately as if we gave it starch; and this is in fact what is done, when children are fed upon what is sold in shops under the title of "Farinaceous Food,"—empirical preparations of which no one can understand the composition without analysis. Of the bad effects produced in children by the use of these most exceptionable mixtures, I have had abundant opportunities of forming an opinion, and I am inclined to infer that many of the irregularities of the bowels, the production of wind, &c. in children, are often attributable to the use of such unnatural species of food. It should be remembered that all starchy food deprived of nutritive matter is of artificial production, and scarcely if ever, exists in nature in an isolated form. The administration of the arrow-root class is therefore only admissible when a sufficient amount of nutritive matter has previously been introduced into the digestive organs, or when it is inadvisable to supply nutrition to the system; as in

cases of inflammatory action. In such cases the animal heat must be kept up, and for this purpose, calorifiant food alone is necessary. This treament is equivalent to removing blood from the system, since the wasting of the fibrinous tissues goes on, while an adequate reparation is not sustained by the introduction of nutritive food. A certain amount of muscular sustentation is still, however, effected by the arrow-root diet; since according to the preceding tables, it contains about one-third as much nutritive matter as some wheat flours. The extensive use of *oatmeal*, which is attended with such wholesome consequences among the children of all ranks in Scotland, is, however, an important fact, deserving serious consideration, and it appears to me, is strongly corroborative of the principles which I have endeavored to lay down.—*Ib.*

On the Structure and Development of the Liver. By C. Handfield Jones, M.B. Cantab. Communicated by Sir Benjamin C. Brodie, Bart., F.R.S. &c.—The author gives a detailed description of the structure of the liver in animals belonging to various classes of the animal kingdom. He states that in the Bryozoon, a highly organized polype, it is clearly of the follicular type; and that in the Asterias, the function of the liver is probably shared between the closed appendage of the stomach, and the terminal cæca of the large ramifying prolongations of the digestive sac contained in the several rays. Among the Annulosa, the earthworm presents an arrangement of the elements of the hepatic organ, corresponing in simplicity with the general configuration of the body, a single layer of large biliary cells being applied as a kind of coating over the greater part of the intestinal canal. In another member of the same class, the Leech, in which the digestive cavity is much less simple, and presents a number of sacculi on each side, these elements have a very different disposition; and the secreting cells, although some remain isolated, for the most part coalesce to form tubes, having a succession of dilatations and constrictions, and finally uniting and opening into the intestine. In Insects, the usual arrangement is that of long curved filamentary tubes, which wind about the intestine; these, in the meat-fly, are sacculated throughout the greater part of their course, till they arrive quite close to the pylorus, where they open; near their origin they appear to consist of separate vesicles, which become gradually fused together, but occasionally they are seen quite separate. The basement membrane

of the tubes is strongly marked, and incloses a large quantity of granular matter of a yellowish tinge, with secreting cells; another portion of the liver consists of separate cells lying in a granular blastema, which cells, in a later stage of development, are seen to be included in vesicles or short tubes of homogeneous membrane, often coalescing and exhibiting a more or less manifestly plexiform arrangement. The author has termed this the *Parenchymatous portion* of the liver, on account of its general appearance and mode of devolopment, though he has not been able to determine whether the tubes always originate from it. Among the Arachnida, the follicular type of arrangement prevails; and the same is the case with the Crustacea, the follicles in these last being distinctly visible to the naked eye. In Mollusca also, we find the follicular arrangement universally to obtain; yet in certain cases the limiting membrane of the follicles cannot be shown to exist, and the author therefore thinks that its importance is probably not great, but that it serves chiefly to fulfil the animal function which its synonym, "*basement*" indicates. The quantity of retained secretion in the liver of molluscs seems clearly to imply that the bile in them is not an excrementitious fluid; it is used slowly on account of the imperfect character of the respiration.

In passing from the Invertebrata to the Vertebrate division of the animal kingdom, and beginning with the class of Fishes, a great change is immediately manifest in the form and character of the biliary organ; it is now a gland of solid texture, to which the term *parenchymal* is justly applied. Two portions may be distinguished in it, namely, the secreting parenchyma, consisting of delicate cells, or very often of nuclei, granular and elaborated matters in great part, and the excreting ducts, which though completely obscured by the surrounding bulky parenchyma, may yet be satisfactorily demonstrated, and traced often to their terminal extremities in the following manner. If a branch of the hepatic duct be taken up in the forceps, it may be dissected out without much difficulty from the surrounding substance, which is very soft, and yields readily to gentle manipulation; when a trunk is in this way removed and placed under the microscope, a multitude of minute ramifications are seen adhering to it; among these not a few may be discovered, which do not appear to have suffered injury; some are occassionally seen terminating by distinctly closed extremities; more usually the duct becomes very minute, and gradually loses all definite structure, appearing at last like a mere tract of granular matter; in either case there

is no communication by continuity with the surrounding parenchyma. Large yellow corpuscles, peculiar cells, and a considerable quantity of free oily matter usually existing in the liver of various fishes, seem generally to indicate a great superiority in the amount of secretory over that of excretory action, and to betoken clearly the feeble intensity of the aerating functions.

In reptiles, there is the same arrangement of the liver, namely, a secreting parencyma of cells and an apparatus of excretory ducts, which have the same essential characters as those of fishes; but there exists very frequently in the parenchyma remarkable dark corpuscles, which appear to be masses of retained biliary matter, the import of which, in the situation they occupy, is doubtless the same as that of the similar masses existing in fishes.

In Birds, the parenchyma of the liver is remarkably free from oily or retained biliary matters; it often consists almost wholly of free nuclei and granular matter, with scarcely a single perfect cell; the excretory ducts often greatly resemble those of reptiles, sometimes rather those of mammalia; the essential character is, however, always the same, namely, that they terminate without forming any important connection with the parenchyma.

In mammalia, the parenchyma of the liver consists usually of perfect cells, which are arranged often in linear series of considerable length, radiating from the axis of each lobule; these unite at various points with each other, so as to present a more or less decidedly plexiform appearance. Each lobule, as described by Mr. Kiernan, is separated from the adjacent ones by the terminal twigs of the portal vein, and to a greater or less extent by a "fissure," though in most animals the lobules are continuous with each other both above and below the fissure. The elaboration of the secreted product seems to be most completely effected in the cells adjoining the margins of the lobules, which are often seen to contain a larger quantity of biliary matter than those in the interior, and to be apparently in the act of discharging it into the fissure; the margin of the lobule then presents an irregular surface with large globules of the secretion clustering together all over it. The capsule of Glisson surrounding the vessels in the portal canals, gives a fibrous investment to those surfaces of the lobules which are toward the canal; but when it has arrived in the fissures, it forms a continuous membrane lining the surfaces of opposite lobules; this membrane is often truly homogeneous and closely resembles the basement tissue; there appears oc-

casionally to be a delicate epithelium on its free surface; but this, as well as the membrane itself, is often absent when the margin of the lobules is in that condition which has just been described and which may be termed *active*. The minute branches of the hepatic duct, as they approach their termination, undergo a remarkable alteration in their structure; they lose their fibrous coat, which blends itself with the membranous expansions of the capsule of Glisson; their basement membrane becomes gradually indistinct, and at last ceases to exist; and the epithelial particles no longer retain their individuality, but appear to be reduced to mere nuclei, set very clos etogether in a faintly granular basis substance. The mode of their termination is not uniformly the same; frequently they present distinctly closed rounded extremities, between one and two thousandths of an inch in diameter; at other times they seem to cease gradually in the midst of fibrous tissue, the nuclei alone being disposed for some little way in such a manner as to convey the idea of a continuation of the duct. These ducts can seldom be discerned in the fissures, but have several times been seen in the "spaces," where several fissures unite; they do not form anything like a plexus between the lobules. From the anatomical relation of the ducts to the parenchyma, and from the circumstance that a distinct vessel conveying a different kind of blood is distributed to the hepatic duct, as soon as the liver assumes the parenchymal form, it seems probable that the mode in which the secreted bile is conveyed out of the organ, is by permeating the coats of the minute ducts in obedience to an endosmotic attraction, which takes place between the bile in which the ducts may be said to be bathed, and a denser (perhaps mucous) fluid formed in their interior. The large quantity of oily matter frequently existing in a free state in the secreting parenchyma of the liver, which must be regarded as a product of secretory action, seems to suggest the idea, that a certain quantity of the biliary secretion may be directly absorbed into the blood, and in this manner conveyed away from the organs, just as occurs in the thyroid body, suprarenal capsules, and other glands unprovided with efferent ducts.

With respect to the development of the liver, the author considers the opinion of Reichert to be decidedly the correct one, namely, that its formation commences by a cellular growth from the germinal membrane, independently of any protrusion of the intestinal canal. On the morning of the fifth day, the œsophagus and stomach are clearly discernible, the liver lying between the heart, which is in front, and the stom-

ach, which is behind; it is manifestly a parenchymal mass, and its border is quite distinct and separate ftom the digestive canal; at this period the vitelline duct is wide, it does not open into the abdominal cavity, but its canal is continued into an anterior and posterior division, which are tubes of homogeneous membrane, filled, like the duct, with opaque oily contents; the anterior one runs forwards, and forms behind the liver a terminal expanded cavity, from which there passes one offset, which gradually dilating, opens into the stomach; a second, which runs in a direction upwards and backwards, and forms apparently a cæcal prolongation; and the third and fourth, which are of smaller size, arise from the anterior part of the cavity and run to the liver, though they cannot be seen to ramify in its substance; at a somewhat later period, these offsets waste away, excepting the one which is continued into the stomach, and then the mass of the liver is completely free and unconnected with any part of the intestine. As the vitelline duct contracts, the anterior and posterior prolongations of it become fairly continuous and form a loop of intestine, the posterior division being evidently destined to form the cloaca and lower part of the canal. The final development of the hepatic duct takes place about the ninth day, by a growth proceeding from the liver itself, and consisting of exactly similar material; this growth extends towards the lower part of the loop of the duodenum, which is now distinct, and appears to blend with the coats of the intestine; around it, at its lower part, the structure of the pancreas is seen to be in process of formation. The further progress of development of the hepatic duct will, the author thinks, require to be carefully examined, but the details he has given in this paper have satisfied him of the correctness of the statement that the structure of the liver is essentially parenchymal.—*Proceedings of the Royal Society*, 1847.

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AMERICAN MEDICAL ASSOCIATION.

On the first Tuesday in May, according to previous announcement, the American Medical Association met in Baltimore. The number of Delegates in attendance was two hundred and seventy-seven, comprising representatives from about twenty States, and most of the Medical Schools and Societies in the country. The officers of the Association present were—Dr. Chapman, of Philadelphia, President; Dr. Knight, of New Haven, and Dr. Stevens, of New York, Vice Presidents; Dr. Stillé, of Philadelphia, and Dr. Dunbar, of Baltimore, Secretaries; and Dr. Hays, of Philadelphia, Treasurer. Two of the Vice Presidents, Dr. Moultrie, of Charleston, and Dr. Buchanan, of Nashville, were absent. The western and south-western States were not fully represented; only about fifteen delegates were present from all the States west of the mountains, and these were from Ohio, Indiana, Illinois, Missouri, Tennessee, and Kentucky. It is not, however, to be inferred from this that our brethren in those quarters are indifferent to the objects of the Association. The reverse, we are persuaded, is the fact, of which they will give full proof when the Association shall meet, as it will do at an early day, in one of our western cities.

The opening address of the President disappointed us, as we believe it did most of the members. We expected something studied and elaborate—a discourse carefully prepared, setting forth the aim and tendencies of the Association, or indicating the progress of medical science during the past year. Professor Chapman favored the Association with nothing of the sort, but addressed the body in a few extemporaneous remarks pronounced in the handsomest manner, but hardly doing justice to the profession, which he represented as having ceased to command the homage of society which it once enjoyed—as having, in some degree, lost caste, and become "tainted."

We are sure that the late venerable President of the American Medical Association is the last man who would afford "aid and comfort" to the enemies of his profession, but it cannot fail to strike any one that such representations are calculated to give peculiar pleasure to those who are in the habit of decrying scientific medicine. The error no doubt grew out of the unpremeditated character of the remarks, for no one is more fully persuaded than Professor Chapman that our profession was never more progressive or more respectable than it is at the present day, and that it never embraced so large a number of truly scientific and enlightened practitioners. It was enough to be present at the Association and listen to the reports and remarks of its members, to be satisfied that this is not more true of the profession in any country than our own; and we confess that to us it was one of the gratifying circumstances of the meeting that, while much was said about improvement, very few speakers used the word "reform." It was evident, that the idea in the minds of the vast majority of the members was, not to *reform* the profession, but to carry it forward in its career of advancement; and such is the tendency of the annual meetings of the Association, from which will go forth influences that cannot fail to be felt for good throughout the land.

The election of officers, which followed soon after the delivery of the address by the President, excited much interest, and occupied an unnecessary amount of time. The committee of nomination were unwisely instructed to report to the Association three names for each office, to which members were allowed subsequently to add as many more as they pleased. The result was, that in the scattered vote only three officers were elected on the first ballot—Professor Jackson, Vice President, Dr. Stillé, Secretary, and Dr. Hays, Treasurer, all of Philadelphia. A second ballot consumed the afternoon session, and

before the result was stated by the tellers, next morning, Dr. Hays offered a resolution to the effect that, inasmuch as many members had voted on the second ballot under a misapprehension of certain restrictions placed upon the nominations, it be set aside, and a committee appointed to *report* officers to the Association. This resolution was adopted, and the ballot accordingly set aside. Dr. Jackson then rose and after stating that he thought it would conduce to the harmony of the meeting to let the committee about to be appointed report *all* the officers, resigned the office which had been conferred upon him the evening before. Under the same view of the case, Dr. Hays and Dr. Stillé also resigned.

In the discharge of their duty the nominating committee recognised the claims of the several great divisions of our country, as will be seen by the following list of officers presented by them to the Association:

Dr. Alexander H. Stevens, of New York, President.

Dr. John C. Warren, of Boston, Dr. Samuel Jackson, of Philadelphia, Dr. Paul F. Eve, of Augusta, Georgia, and Dr. W. M. Awl, of Columbus, Ohio, Vice Presidents.

Dr. Alfred Stillé, of Philadelphia, and Dr. H. J. Bowditch, of Boston, Secretaries.

Dr. Isaac Hays, of Philadelphia, Treasurer.

These nominations were unanimously concurred in by the Association, and thus the matter which had already taken up too much time was summarily disposed of. The President elect was conducted to the chair, who upon taking his seat acknowledged the honor thus conferred upon him in a few appropriate remarks.

A report from the Treasurer was then received in reference to the assessment necessary for meeting the expenses of the ensuing year. According to a provision of the constitution the annual assessment cannot exceed three dollars. The transactions of the Association, he conjectured, would make a volume of eight hundred pages, and the expenses for the year would probably amount to sixteen hundred dollars. The deficit, whatever it might be, he thought, might be made up by voluntary contributions from Institutions and Societies, and by the sale of the transactions.

The annual report of the standing committee on Obstetrics was then read by the chairman of the committee, Dr. Hervey Lindsley, of Washington City. The report was chiefly devoted to the history of Etherization in obstetrical practice, and presented a highly favorable

view of the new agents. Dr. Lindsley is a decided advocate for the use of anæsthetics in certain cases of parturition. It is hardly necessary to say that not a few members dissented from his views, and that in regard to the whole subject of etherization there was much diversity of opinion in the Association.

A communication from the College of Pharmacy, of New York, relative to the importation of spurious drugs into this country, was received and read. Dr. Edwards, a member of Congress from Ohio, being present, read to the Association a highly interesting document on the same subject. He entered into details, showing that the evil had grown to be an enormous one. The articles of the materia medica in general use are now so frequently adultered, that the physician cannot be too careful in the selection of his medicines. Quinine, opium, scammony, iodine, and hydriodate of potash are among the articles most liable to adulteration, and it would appear that they are sometimes adulterated, "to order," for the Western market. It is high time that this matter was looked into by our government. Dr. Edwards read a law which he had drawn up providing for the appointment of competent persons as examiners of all imported drugs at the different seaports, and urged upon the Association the necessity of immediately memorializing Congress in favor of its enactment. He had strong hopes that, by the concerted action of the profession, he would be able to get it through Congress at its present session.

The report of the standing committee on Surgery was then read by the chairman of the committee, Dr. George W. Norris, of Philadelphia, and was listened to with marked attention. It presented a clear and able narrative of the progress of Surgery during the past year, and embraced the history of some important surgical cases. It will form a part of the volume of transactions which the profession may soon expect, and when it appears we hesitate not to promise that it will be deemed a valuable contribution to our professional literature.

Dr. Isaac Parrish, of Philadelphia, a member of the same committee, also read a report relative to the use of anæsthetics in Surgery. An admirable summary of what had been effected by these agents in different countries was given, and an opinion was expressed by the writer favorable to their employment.

The reading of Dr. Parrish's report occupied the Association up to the hour of taking recess. In the afternoon, the report on American Medical Literature was read by Dr. Oliver Wendell Holmes, of Boston,

chairman of the committee. The reputation of the author for wit and poetry, as well as for professional learning and critical acumen, had excited in the members of the Association great curiosity to hear this report. We did not hear the conclusion of the report and are not able, therefore, to speak of it as a whole, but so much of it as we heard appeared to us just, able and judicious. Some of the strictures of the writer were severe, but, we thought, not unmerited. Many of the members thought that he evinced a disposition to sneer at our medical literature, and was partial in his retrospect and comments. He was charged with showing an overweening regard for the Journals published near Boston, and overlooking the merits of others more remote. But it is easy to perceive how, from the very nature of his task, it was impossible for Dr. Holmes to satisfy all his hearers. The Association was made up, in large measure, of men who had aided in swelling the volume of American medical literature. In a rapid survey, such as he was obliged to take in a report like this, of so wide a field, it ought not to surprise any one, that he failed to do justice to many; and if he was attracted longer by familiar names than by others, perhaps equally meritorious, of which, in the distance, he had heard less, this is precisely what must occur to every one who writes on such a subject. We shall be disappointed if Dr. H.'s report is not deemed a very able one.

After the reading of Dr. Holmes' report, the subject of etherization was discussed until the hour arrived for adjourning. Professor Warren of Boston, presented his views at length. Dr. W. is known to be one of the warmest advocates in the country for etherization. He reported a number of cases in which he had lately seen the best effects from the practice; but he is disposed to regard chloric ether as a preferable agent to either sulphuric ether or chloroform. Time did not afford other members an opportunity to express their views, some of which would have been widely variant from those of Professor Warren. We shall recur to this subject again.

Thursday morning, the standing committees were appointed, a list of which and of the members composing them will be given hereafter. The Association then proceeded to determine on the next place of meeting, and this question gave rise to some debate. Some members were fearful, that, if the Association continued to hold its meetings in the Atlantic cities, the West would become dissatified and start a separate organization. On the other hand it was contended, that at present the west was hardly prepared to do herself justice, since she had compara-

tively but few medical societies, and could not send many delegates to the Association, even if it should meet in one of her own cities, but that another year being given, associations would be formed in all parts of the country, and a full representation be ready to welcome it to the west. It was decided, in the end, to meet next spring in Boston, with the understanding that the year after the place of meeting should be Cincinnati.

Dr. Wellford, of Fredericksburg, Va., now proceeded to read the report of the committee on Medical Education, of which Dr. Stevens was chairman. The report was accompanied by a number of resolutions, three of which had an important bearing upon medical schools, and in substance are as follows: 1st. That the plan of education in any medical school must be considered radically defective, which does not embrace anatomical dissections by the pupils, and clinical instruction. 2d. That it be recommended to medical schools in the country which have not already done so, to extend their sessions to five months. 3d. That it be recommended to the Faculties of the several medical schools to associate with them, in the examination of their students for the doctorate, a number of physicians not connected with the schools.

The first of these resolutions passed unanimously. The second was adopted with little division, although it is known that not a few gentlemen in the Association connected with medical schools, question the policy of lengthening the lecture term. Upon the third, the vote was by no means unanimous. No topic came before the Association concerning which the sentiments of the members were so discordant as that of medical education, and it was but too apparent that they were most confident in their schemes of innovation who had enjoyed least experience as teachers. But, upon the whole, although there were radical and extravagant suggestions made by a few, great moderation and freedom from narrow prejudices characterized the decisions of the Association on this important subject. As to the third resolution, under the present arrangement in most of the schools, we suppose it will prove a nullity. Physicians qualified to examine students will not be found willing to undertake, gratuitously, the responsible task of deciding upon the qualifications of candidates for the degree of doctor of medicine, and Professors regard the fee paid by graduates as hardly an adequate remuneration for their own services.

Professor Smith, of New York, chairman of the committee on Practical Medicine, reported that he had unfortunately lost his baggage

on his way to Baltimore, and with it his report. He stated briefly the leading points embraced in his report, which document he was requested to furnish to the committee on publications. His friends expected from him an able paper, and we shall look with interest for it among the proceedings of the Association.

Professor Dickson, of New York, was not present, but it was announced that his report on the Medical Sciences was at the disposal of the Association. It was referred to the Committee on publications, as were a number of other interesting communications, among which was a paper by Dr. Buck, of New York, describing a fascia of the penis lately discovered by him.

A communication from the National Institute on the subject of Hygiene was read by Dr. Winne, of Baltimore, which led to the appointment of a committee to investigate the sources of disease in the principal cities and towns in the United States. Valuable statistics will, no doubt, be laid before the Association at its next meeting touching the subject of Hygiene.

Dr. Atlee offered a resolution recommending the formation of State Medical Societies, where none now exist, which was adopted. We hope the suggestion will meet with a hearty response from the profession, and that no State will long be without a medical society.

An incident occurred on the first day of the meeting to which it is proper that we should allude, more particularly as it has been made the subject of remark in some of the religious newspapers, and if not explained may lead to impressions unfavorable to the religious character of the Association. When the committee for the nomination of officers had retired, Dr. Grafton Tyler, of Washington city, offered a resolution that the daily sessions of the Association be hereafter opened with prayer, and instructing the committee of arrangements to procure the services of such ministers as they saw fit. This resolution ought to have prevailed without a word of comment or opposition, but, constituted as the association was, such a result could hardly have been expected, and therefore it was unfortunate that such a proposition was submitted. Among men of every religious creed, accustomed to express their sentiments with the utmost freedom, it might have been foreseen that there were those who would object to such a procedure. Dr. Thomas, of Baltimore, belonging to the society of Friends, opposed it, and he was sustained by Dr. Bond of the same city, though upon different grounds. The service, he said, would be agreeable to him, and probably to the many; but since there

were those to whom it would be unpleasant, he hoped Dr. Tyler would withdraw his resolution. Dr. T. replied that he had offered it under a sense of duty and could not withdraw it. Dr. Stewart, of New York, moved to lay it on the table, which after some discussion was withdrawn. The motion to lay on the table was immediately renewed by half a dozen members, and upon the question being taken it was determined in the affirmative.

In the afternoon the subject was revived by a resolution, offered by Dr. Reese, of New York, to the effect that the Association desired it to be understood that in laying the resolution, in relation to opening the sessions with prayer, on the table, they disclaim any want of respect for devotional exercises on such occasions, and that the action must be regarded in the light of a concession to those members who had scruples of conscience on the subject. The discussion which ensued upon this resolution was the warmest elicited at the Association. Dr. Harris, of Tennessee, spoke with great earnestness and feeling in favor of the original proposition. When he concluded, Dr. Kreider, of Ohio, moved to amend the resolution by substituting that a certain portion of Scriptures should be read by the President every morning. He was followed by Professor Harrison, of Cincinnati, in a most fervid speech, in the course of which he was so unfortunate as to refer to our age and country as "protestant." His language brought on a tempest of cries for "*order*," and "*question*," during which he sat down. The resolution of Dr. Reese was adopted.

The resolution expressed the sentiments of the Association. It was felt to be inexpedient to press the first proposition, precisely as in the Board of the American Bible Society, composed of Christians of various denominations, it was found necessary, in the beginning, to adopt a law that their meetings for business should not be opened with prayer. A portion of Scripture is read, but prayers are excluded, because a form could not be agreed upon. If the American Bible Society has experienced the necessity for such a rule, certainly the American Medical Association, embracing Jews and Christians, Catholics and Protestants, may be excused for having yielded to its necessity. We cannot doubt that this explanation will be satisfactory to our friends who have felt aggrieved by the decision of the Association.

We have not reported as fully as we intended the doings of the Association, but find ourselves arrived at the limits assigned us, and must therefore reserve for our next number the remainder of our narrative.

The meeting to us was one full of interest, and inspired us with higher hopes for our profession. We trust that the Association may now be considered firmly established, and that its annual meetings will be invested with a continually increasing interest.

After a most harmonious session of four days, the Association adjourned on Friday, the 5th of May, at 11 o'clock, A.M., to meet in Boston on the first Tuesday in May, 1849.

FOREIGN CORRESPONDENCE.

Dr. David W. Yandell, so long our foreign correspondent, arrived at New York on the 22d of May, in the steamship Hermann, from Southampton, and is daily looked for in Louisville. He is bringing home with him copious notes on medical matters and men in Europe, and we hope will continue to favor us with his valued contributions. Mr. David C. Tandy, a most promising young Kentuckian, who has been pursuing his medical studies for several years in Europe, will succeed him as foreign correspondent of our Journal. Dr. Yandell returns to pursue his profession in Louisville.

DUBLIN DISSECTOR—FIFTH EDITION.

We have been somewhat remiss in not calling attention to the new edition of this admirable book. The author, Dr. Harrison, has given it a thorough revision, introduced numerous engravings, and added much new matter, particularly on General and Structural Anatomy, also on the Nervous System and on the Organs of Sense. These additions increased the size so much as to render it expedient to divide the work into two volumes, each of which has a copious index. In its present form it is one of the most beautiful books that we have ever seen.

OBITUARY NOTICES.

Died, in Princeton, Ky., on Saturday, April 29, 1848, Dr. James E. Throckmorton.

Dr. Throckmorton was one of the oldest and most influential members of the profession in south-western Kentucky. He was an active

and successful practitioner for about forty years, and during that long period sustained the character of a learned physician and a liberal and accomplished gentleman.

Died, in this city, on Saturday, May 5, 1848, after a short illness, Dr. W. N. Miller, aged 27 years.

Dr. Miller was a capable and skilful physician, and was rapidly acquiring the confidence of the community when he was thus cut off. He was upright and courteous in his bearing towards his brethren, zealously devoted to the profession, and ready and prompt in the discharge of his professional and social duties. He left a wide circle of friends to deplore his early death.

Died, suddenly, in this city, on Saturday, May 27, 1848, Doctor E. Lindenheim.

Dr. Lindenheim was a native of Germany, and received his education at the Frederic-William University of Berlin. He had resided in this city about two years, and had made many friends both among the foreign and native population.

Dr. L. H. Mosby, long a citizen of Louisville, and an old and highly respectable practitioner of physic, died at the residence of his daughter, Mrs. McCutchen, in Mississippi, on the 6th of May, in the 58th year of his age. It has not fallen to the lot of the writer of this notice to know a more conscientious or amiable individual than the deceased, and he deems it a simple act of justice to his memory thus to bear testimony to his virtues. Dr. Mosby was a Virginian by birth and education, and possessed all the warmth of feeling supposed to belong to southern character; but his ardor was in the social and gentler feelings, for he seemed to us as free as men ever become in this world from all that is termed passion. He possessed an active and inquisitive mind, which was improved by a thorough preliminary and professional education, and but for an unfortunate impediment in his speech, and infirm health, he would assuredly have attained to eminence in his profession. He was post-master at Louisville during the administration of Mr. Tyler, and for many years was too feeble to perform the labor of a large practice. He died, as he had lived, at peace with all men, and in full assurance of the hopes of the gospel.